#### **Editor's Pick**

### Rakesh Singh

### Why is CTRM not able to scale up like ETRM

----- Arcticle source ----- https://www.wipro.com/blogs/rakesh-singh/why-isctrm-not-able-to-scale-up-like-etrm/ ---- About the Author Contact Wipro Please fill the required details to access the content Why is CTRM not able to scale up like ETRM September | 2016 The Commodities Trading & Risk Management (CTRM) industry is going through lot of churn today and many have written about the best-fit software solutions and their maturity for CTRM players. However, a handful of articles focus on successful implementations and satisfied customers. And rarely do we hear if these best-fit standard software solutions actually drive loyalty amongst an organization's customers? So that leads us to the question - do enterprises lean towards these standard software solutions or do they build their own software today? There is certainly an evident trend of enterprises building their own software' today. Here are some factors driving this: Lower Margin Game One of the important angle to maturity of software is the customer spend. And, with Commodities being a "low margin" business, overall spend on CTRM is quite low. High Commodity Spread If a product vendor has to fit into cross commodity business, the spread is vast and the effort is very high - as every commodity has its own uniqueness. Cross commodity variation for similar product features and unit of measure is complex. Transportation planning (multiple modes), execution and related paper work are very important but diversified and complex. In addition, quality becomes a big differentiator for commodities. Adulteration may have significant impact on the downgrade of a commodity, its usability as well as the overall contract and this in turn raises the demand for related software. Similarly, functionalities like traceability and sustainability are adding another dimension to the commodity trading needs which is not there for energy players (except bio-fuel). High on Non-Standardization Standardization level in commodity trading is low and spreads from data to high claim of unique processes by commodity controllers. If we compare it with the Energy vertical that has direct customer impact, it is high on "Regulation & Compliance" and therefore higher on standardization quotient. Due to nonstandardization, implementation timeline is very high and user satisfaction level is low. Implementation also runs under high risk of failure if the scope, stakeholder management and change management is not managed well. Many large companies have high global spread (ABCDs of commodities world) and therefore, requirements vary and implementation becomes difficult. High Level of Localization Localization for many commodities and related processes are very high and differs significantly as we move across geography e.g. Brazil vs. US vs. Indonesia. This includes functionalities like Origination, Taxation, Settlement, etc., therefore making life difficult for CTRM product vendors. Fewer Customers There are relatively very few big companies with propensity to spend high dollar number for buying best in class product. Trading vs. Processing spread is different for different companies and commodity asset class and therefore the overall need varies. Many of these companies have grown through acquisition and that makes the variation high and implementation of standard product difficult. Since the overall spend is low, market size becomes small which in turn urges makes CTRM product vendors to invest small in the product. Since the spend is low, variation in functionality across asset class is high. BUT, in case you are still looking at buying one from the market, wait for my subsequent post to discover the product landscape.... Rakesh Singh is the Practice Head for Commodities Trading & Risk Management. He has been in the industry for 18 years working across business functions, commodity asset class and services including exchanges, consultancy firm, product vendor and IT services firm. He has led projects related to business process harmonization, product selection, solutions development and managed services in trading & risk management domain.

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#### **Mukund Kalmanker**

## To Generate Real Value from AI, Focus on the "I" to Create an Intelligent Enterprise

----- Arcticle source ----- https://www.wipro.com/blogs/mukund-kalmanker/to-generate-real-value-from-ai-focus-on-the-i-to-create-an-intelligent-enterprise/ ----- About the author Contact Wipro Please fill the required details to access the content To Generate Real Value from AI, Focus on the "I" to Create an

Intelligent Enterprise October | 2020 AI has been around long enough that it should no longer be considered novel, yet some companies still struggle to unlock value from it. The problem? Many organizations treat AI as a technology, as a simple tool that can be applied to isolated problems to predict a stated set of outcomes, or to automate processes as point solutions, or to reduce costs. There is clearly some value in that approach, but not enough given AI's vast potential. Instead, companies need to stop thinking about AI as a technology and start thinking about how they can leverage AI to create an "intelligent enterprise," one that is empowered to create new kinds of customer interactions and unlock new revenue streams. In other words, the "I" in AI is critical. The Evolution of Enterprise Computing In the 1990s, enterprise technology mainly focused on computing. The 2000s represented an explosion in terms of data. The 2010s went one step further by extracting insights from that data for specific applications, largely through analytics. In the 2020s, we will experience the era of intelligence, a time when insights are woven together to crate a fabric that unites functions and business units to not only reduce costs, but also to create new value. Moving forward, AI will improve performance by functioning less like a computer and more like the human brain. A computer can sift through a set of data and highly differences, discrepancies, and other patterns. Contrast that to the human brain, which recognizes patterns, recommends actions or responses, and — critically — learns over time. That kind of intelligence is where companies are moving today. When business intelligence incorporates information decisions, changing behaviors and interactions, and learning, it is a capability not in isolated applications, but across the entire enterprise. Viewed through this prism, intelligence fostered by AI is a means of connecting with customers in a different manner, creating new digital experiences that unlock new frontiers of growth. The lighting industry offers a good example. Rather than sell bulbs in the traditional manner, the industry is moving into offering "light" as a service. The infrastructure would be maintained by the company, and it would use intelligence arising from consumer data and IoT devices to determine consumer needs and preferences at a granular level (e.g. the lighting required based on time of day or environmental conditions, or the number of people using it). Similarly, manufacturers in the aerospace industry have moved from selling jet engines to selling jet-engine "service" based on how long the engines are running. This is enabled by real-time operational intelligence data from embedded sensors in each engine that also monitor engine performance, how it can be improved, upcoming repairs, and other factors. To be clear, the "as-a-service" business model is not new, but enterprises can better apply this model if they have intelligence about customer needs and operational performance, enabling them to dynamically tailor their offerings in response to changing markets. As a result, the service model can be applied across a wider range of industries, unlocking new revenue streams. Four Levers for Leadership Teams to Address Given the scope of potential transformation from becoming an intelligent enterprise, AI needs to move beyond the realm of the CIO and cost reductions to a key strategic consideration for the entire C-suite and Board. Specifically, leadership teams should look at the impact from AI the value being generated by operating as an intelligent enterprise — across four levers: Rather than addressing these elements one by one, the C-suite must look at all four simultaneously. Companies also need to assign a

numerical score to all four areas, combining them into a single number that we call the enterprise intelligence quotient (E-IQ). Only in that way can leaders get a clear sense of how the company is using AI to create new business value, and how it is improving in this area over time. The goal is to use AI to develop intelligence that enables companies to interact with the world much like people interacting with their own environment. An intelligent enterprise can gather information from internal and external sources, then use that information to frame decisions, take action, assess results, and learn over time. For example, corporate finance functions have led the way in terms of implementing AI, with the goal of generating moreaccurate financial forecasts. The next step is to move beyond predictions to leverage AI to shape business performance. That entails pulling data from a wider range of sources — not just internal, but also external information such as market trends, regulatory changes, competitors' performance, and other inputs — then on an ongoing basis determining whether the company's strategy is optimal for the environment and ecosystem in which it operates. The finance function can propose a specific action, such as shifting production from one line to another, or reallocating resources to a fastgrowing market, then gauge the impact of that action to improve over time. Such an adaptive approach has become a particular necessity in the wake of the pandemic, but it requires real enterprise intelligence. Other clear use cases involve reimagining any processes involving paper (such as compliance), voice input (call centers), or IoT data (manufacturing facilities and logistics fleets). Still others are domain-specific applications for individual industries: financial services, health care, aerospace, consumer goods, and so on. These wide-ranging use cases have one aspect in common: they look beyond AI as a technology and instead use intelligence as an underlying fabric to actively improve business results. That represents a big step forward for many organizations, but one that is necessary to create a truly intelligent enterprise. Mukund Kalmanker VP of Intelligent Enterprise and AI, Wipro Digital Mukund and his teams collaborate with leading companies across industries to deliver experiences aligned to emerging digital behaviors, achieve competitive business insights, and drive efficiencies by leveraging technologies such as Artificial Intelligence, Machine Learning, RPA, and Big Data. He has more than 21 years of source ---- https://www.wipro.com/blogs/natesh-g/ ---- Contact Wipro Blogs By Author Please fill the required details to access the content Natesh G Natesh G IT Head - Digital delivery and solutions Natesh G has more than 21 years of experience and has expertise in strategizing and delivering large & integrated IT Business Transformation Programs for large global enterprises, In his current role Natesh is Heading IT - Digital delivery and solutions in Swire Shipping. He has 8+ years of experience in DevOps and has led the adoption of DevOps in Swire Shipping.

============================----- Arcticle source ----- https://www.wipro.com/blogs/viswanathan-ramaswamy1/ ----- Author's Posts Contact Wipro Emerging trends in digital transformation journey with DevOps Please fill the required details to access the content Viswanathan Ramaswamy Viswanathan Ramaswamy Vice President, Communication Service Provider, Wipro Viswanathan Ramaswamy (Vishy) is Vice President in Wipro, handling global technology competency and practice for the Communications Service Provider industry. He heads a team of telecom

domain professionals experienced in areas of OSS, BSS, SDP, telco cloud. network applications, etc. With over 26 years of industry experience in the telecommunications field, Vishy's expertise ranges from R&D, project implementation to network operations. Vishy's an IP networks and OSS expert, with current knowledge of IT and network convergence. He holds a Master's degree in Electronics & Controls and Bachelors in Electronics and Communication Engineering. DevOps has evolved from 'breaking the silos' between operations and developers to enabling automated and streamlined www.wipro.com/blogs/viswanathan-ramaswamy1/digital-divide-how-is-5-ginfrastructure-impacting-inequality/ ----- About The Author Contact Wipro Related Blogs Connectivity and Interoperability: Realizing the Full Potential of Comprehensive IoT Solutions Is Salesforce Right for My Nonprofit Organization? Beyond the Pandemic: Key Priorities for Agility and Growth Please fill the required details to access the content The Digital Divide: How Is 5G Infrastructure Impacting Inequality? January | 2021 The idea that 5G technologies will uplift the world is an inspiring and popular proposition. However, the realities of life - and how human beings behave, govern themselves, and prioritize their self-interests - will truly determine the ultimate value and impact of 5G technologies. Currently, the exciting narratives being promoted by the enterprises that will benefit from 5G are captivating and indeed plausible. But the real world, as we know, is much more nuanced, inequitable, and historically unfair. How 5G infrastructure, from small cell networks to beamforming capabilities, is rolled out across the world and our communities will directly benefit those with modern devices and quality access - and perhaps further entrench those without resources more deeply into the disenfranchised quagmire of the digital divide. Leading nations in the global economy, from China and India to Japan and the United States, are expediting 5G infrastructure regulations and projects to capitalize on the competitive benefits seamless adoption provides their businesses and populations. These investments, however, could exacerbate existing inequalities that currently fuel income disparity and undermine social stability. The economic prosperity resulting from 5G technologies could be tempered by the expanding gap between those with access to technologies and connectivity and those increasingly disenfranchised from such resources and opportunities. The line separating these groups is often drawn between urban and rural areas. China's 5G infrastructure, for example, is mainly focused on the population centers of Shenzhen, Beijing, and Shanghai; in fact, 30% of China's 5G infrastructure resources serve just 4% of the nation's actual population. In the real world, balancing opportunity with need can complicate the benefits of 5G technologies. But there are still plenty of reasons to be hopeful. Equality, Infrastructure, and the De-Balkanization of Data Some nations simply have better 5G data infrastructure - and therefore better access to ideas, knowledge, and information - than others. Reliable, high-quality access to data is key to maintaining educated workforces and viable businesses in a competitive global marketplace. While 5G infrastructure advantages may offer some nations an edge, these advantages are likely to be only shortterm due to basic supply-and-demand dynamics. The globalization of work is driving a constant push by industries and citizens who demand better data access and storage. The power of business and commerce is propelling data consumption, and new infrastructure will accommodate those consumption

demands in every corner of the world - including currently underserved communities and more rural areas. While governments and policymakers attempt to regulate access to data according to their regional and cultural mores, the power of commerce and demands for unfettered access to knowledge is chipping away at efforts to balkanize data behind digital borders. Governments and regulators are adjusting to facilitate collaborative infrastructure development projects, which oftentimes involve complicated partnerships and relationships spanning countries and even groups of countries. Furthermore, following data consumption trends, many hyperscalers are building cloud-oriented infrastructure to be closer to - and better able to serve - growing demands for data across regions. There is also pressure on the governments and regulators to be proactive in finding ways to secure the handling of sensitive data either within their borders or with trusted neighbors, and simultaneously provide access to data where it is needed. Addressing various security and privacy concerns across different regions and cultures can be difficult. But progress is being made, and as infrastructure shifts more towards 5G consumption, the world will have more reliable, high-quality, and uniform access to work-related and other kinds of data - from villages to megacities. Growing Hunger for Bandwidth Drives 5G Innovation Surging demands for 5G wireless capacity increasingly expressed by people across the digital divide - is setting a baseline for future advancements in telecommunications technology. The 5G and future generations of mobile networking technologies are pushing the Shannon Capacity theorem to the limits, unleashing a constant hunger for more bandwidth and access to data. This is a positive development that will result in the creation of more immersive and experiential applications for 5G users everywhere throughout the digital divide chasm. At the same time, it could challenge the network deployment, as it will lead to a very high density of network elements and usage of spectrum nearing that of visible light. These evolving capacity challenges will force network and telecommunications technologies to devise more innovative solutions. Many advancements in the technology space have created a profound and positive impact on work-life for employees, especially as COVID-19 has accelerated the rise of remote workers and the need for seamless, collaborative team management platforms. Employees once forced to migrate to urban areas and coastal cities for employment can now work from home in locations once isolated in the disconnected reaches of the digital divide. Advancements in the telecom field are enabling 5G technologies to be implemented in timely and direct ways that provide workers with the data capacity needed to perform their work better and faster in remote areas. Some key technologies that will drive development and creativity in the telecom arena include 5G+, network virtualization, network disaggregation, Edge Cloud, AI/ML, SDN, LEO satellites, among other promising technologies. The areas of IT infrastructure, software, and networks are, for example, converging and being treated together in exciting ways. Technology both leads and follows economic prosperity. 5G Connected Coworkers: Managers and Remote Teams New technologies have historically generated hope and skepticism, and this is certainly the case with 5G availability and infrastructure. This ambivalence over where, when, and how to construct 5G resources is understandable, and probably healthy. However, many business leaders and managers are now raising practical, real-world questions and concerns about the (1) security of game-changing

5G technologies on (especially remote) workforces, and (2) how department and team managers can best harness innovation to improve their workers' productivity and advance business objectives. Security Beyond Regional Borders: In contrast to the centralized, in-office structures of pre-pandemic work dynamics, remote workers are increasingly spread throughout different locations in the digital divide and use various pathways to access data. Higher security and privacy controls - including VPN, gateway security, identity, and access control - are needed to provide these distributed workers with access to applications and data from company and client resources. Providing this level of access over a secure network can present latency and bandwidth challenges. However, 5G accommodates these demands, and the network slice capability adds a layer of security and performance for the businesses that rely on remote teams. Though data privacy regulations in each country create challenges to this ubiquitous access, virtual desktop and edge cloud offer reliable work-arounds. Despite the security and privacy challenges posed by remote workers, 5G helps provide robust solutions that should inspire confidence across teams. Leading with an Outcome-Driven Mindset: Business leaders and workforce managers must understand the underlying benefits and technologies of 5G to align their teams for the future of work in a digitally connected global economy. After the COVID-19 pandemic abruptly changed the way businesses find and hire employees, leaders must embrace an outcomedriven and growth mindset that integrates a work-from-anywhere culture into their operations by leveraging 5G technologies. From a skills perspective, managers need to become proficient in the deployment of agile methods, processes, and tools for organizing people, departments, and resources across businesses. Adapting to a digital way of working means using AI/analytics to drive decisions around clear definitions of success, and being conversant with automation tools that streamline experiences so workers can focus on productivity. Leaders with a high-level understanding of how 5G can reduce inefficient processes and increase worker productivity - through virtual reality simulations and even 3D holograms, for example will be invaluable to organizations that want to compete in a hyperconnected future. After all, as 5G technologies continue to blur the line that marks he digital divide, new ways of working - and competing - will fill a void once unfairly sustained by the disenfranchisement of untapped talent. At least, this is what we want to believe. Industry: Viswanathan Ramaswamy Vice President, Communication Service Provider, Wipro Viswanathan Ramaswamy (Vishy) is Vice President in Wipro, handling global technology competency and practice for the Communications Service Provider industry. He heads a team of telecom domain professionals experienced in areas of OSS, BSS, SDP, telco cloud, network applications, etc. With over 26 years of industry experience in the telecommunications field, Vishy's expertise ranges from R&D, project implementation to network operations. Vishy's an IP networks and OSS expert, with current knowledge of IT and network convergence. He holds a Master's degree in Electronics & Controls and Bachelors in Electronics and Communication Engineering. To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. Salesforce offers an incredible range of functionalities, making it difficult to find.... A report from Forrester predicts up to 20% of Fortune 500 companies will not make it through 2021 intact. "[For] some, their assets will be dissolved or

purchased; others will just go out of business." One possible cause of this is a lack of strategy when investing in and utilizing technology. "The pandemic revealed the flaws in many companies' technology...and their tech leaders were found mired in Band-Aids like tech modernization. Arcticle source ----- https://www.wipro.com/blogs/sudeshna-bhadury/ -----Contact Wipro Blogs By Author Emerging trends in digital transformation journey with DevOps Please fill the required details to access the content Sudeshna Bhadury Sudeshna Bhadury Senior Manager, Data Warehousing & Appliance Practice, Wipro, Ltd. Sudeshna Bhadury has more than 19 years of experience across various industries. She has extensive experience in Cloud and Analytics. Sudeshna currently heads Wipro - AWS Launch Pad, a co-innovation centre by Wipro and AWS. She is responsible for enhancing customer mindshare for cloud adoption, curating innovative solutions on AWS and driving delivery from Wipro - AWS Launch Pad. DevOps has evolved from 'breaking the silos' between operations and developers to enabling automated and streamlined processes.

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### Emerging trends in digital transformation

### journey with DevOps

----- Arcticle source ----- https://www.wipro.com/blogs/sudeshna-bhadury/ emerging-trends-in-digital-transformation-journey-with-devops/ ----- About the Author(s) Contact Wipro Related Blogs Metaverse: Business Implications, Monetization Models and Adoption Challenges How blockchain can hack-proof a supply chain Agility is Hard Because Its Soft Please fill the required details to access the content Emerging trends in digital transformation journey with DevOps DevOps has evolved from 'breaking the silos' between operations and developers to enabling automated and streamlined processes. While automation remains a key focus area aimed at removing redundant tasks in the lifecycle of planning to continuous monitoring and collaborative feedback and optimization, we also see some new trends emerging in DevOps; few of these are: In this blog, we will focus on the adoption of managed DevOps services on AWS, which we applied in a recent large digital program for Swire Shipping. Swire Shipping's approach to digital transformation Swire Shipping, is a core operating division of The China Company Pte. Ltd. (CNCo) which is the wholly owned, deep-sea ship owning and operating arm of the multinational Swire Group. Swire Shipping, embarked on a digital transformation journey with Wipro to develop new digital applications providing simplified and connected customer experience. Swire Shipping chose AWS Launch Pad, a state-of-theart co-innovation centre by Wipro and AWS, as the delivery centre for the digital program. The digital program at Swire Shipping is a multi-year journey based on minimum viable product (MVP). To manage rapid growth of digital applications with a lean team, the key requirement is to have

automated DevOps. This in turn will streamline the integration between legacy IT and digital applications. Cloud native application architectures including microservices powered with APIs and serverless computing were inherent choice for Wipro Digital architect team and designing the applications which lead to minimal 'Ops'. The requirement was narrowed down to a robust, easy-to-configure, and use DevOps primarily focused at application code management, continuous application build, and integration and deployment across environments. The choice of methodology, model and tools for DevOps was driven by the need of the hour with given constraints. Considering the need to have quick delivery and fast-paced requirement analysis, design, code development for the planned MVPs for three concurrent streams (e-commerce, Pricing Engine and Liner Operations), agile methodology was the logical choice. Time being a major constraint, the considerations were for a model and toolset with minimal effort and time for setup and configuration with a seamless end-to-end CI/CD pipeline. The solution adopted by Wipro Digital engineering team for Swire Shipping Digital DevOps CI/CD pipeline for all tracks is powered by AWS managed DevOps services including CodePipeline, CodeCommit, CodeBuild and CodeDeploy (See Figure 1 for CI/CD model flow and details). The complete stack being on AWS removed the dependency on 3rd party tool integration and was thus easy to configure, setup and run. For ease of adoption and due to time constraints at the beginning of the development cycle, gitlab which was the default code repository for developers, was used, but it is being replaced by CodeCommit. With small sized target environment for the MVPs, the infrastructure setup and configuration is largely AWS Console driven with semi-automated provisioning using AWS Cloud Formation Templates. Figure 1: CI/CD Model adopted in Swire Shipping. Description of the components in the CI/CD model flow Application provisioning approach for Swire Shipping production environment To ensure tighter security, the production environment is separated from non-production environments and the production AWS account is governed by Swire Shipping IT Policies. The DevOps and CICD services are configured in Swire Shipping non-prod account. Though there are solution options to trigger deployments in production environment from the CodePipelines already configured in nonprod AWS account, due to controlled Swire Shipping production account, following is the current approach for code deployment in production. An S3 bucket provisioned in Swire Shipping production account, contains build artefacts of all deployable modules/services in respective sub-folders. An AWS CodeDeploy project created with a deployment group is mapped to respective auto-scaling group in production Swire Shipping Digital VPC. For any fresh or a new version of any service/component to be deployed in production, the deployment group is triggered which pulls the build artefact from S3 bucket and deploys to all the digital production target instances mapped to respective auto-scaling group. Realized benefits With a one-time effort of configuring the CodePipelines for all modules across the tracks, code provisioning or services deployment in environments has become a smooth process. With the use of AWS-managed DevOps tool chain, the effort of managing and maintaining servers and resources for build and integration has been totally eliminated. Build and deployments in development and staging environments are completely automated, saving time and effort. This also ensures the burden on production support team is minimized as the number of applications increase along the digital journey.

Going forward The solution adopted for the Swire Shipping digital journey will be extended to future MPV and product development. Industry: Natesh G IT - Digital delivery and solutions -Swire Shipping has more than 21 years of experience and has expertise in strategizing and delivering large & integrated IT Business Transformation Programs for large global enterprises, In his current role Natesh is Heading IT - Digital delivery and solutions in Swire Shipping. He has 8+ years of experience in DevOps and has led the adoption of DevOps in Swire Shipping. Sudeshna Bhadury Senior Manager, Data Warehousing & Appliance Practice, Wipro, Ltd. Sudeshna Bhadury has more than 19 years of experience across various industries. She has extensive experience in Cloud and Analytics. Sudeshna currently heads Wipro - AWS Launch Pad, a co-innovation centre by Wipro and AWS. She is responsible for enhancing customer mindshare for cloud adoption, curating innovative solutions on AWS and driving delivery from Wipro - AWS Launch Pad. The Metaverse is collapsing the physical and virtual worlds to create a paradigm shift in interactions between customers, suppliers, partners, employers and employees. It's every company's worst nightmare. In 2019, a global metals manufacturer experienced a ransom-ware attack in which hackers seized and encrypted its computer files, then demanded payment to unlock them. Agility as a concept has been discussed for years, though the competitive advantage of being more agile came into sharp focus in 2020. The increased pace of change, rapidly evolving customer needs, compressed timeframes for responding — all of these and more drove the Arcticle source ---- https://www.wipro.com/blogs/wipro-insights/ -----Author's Posts Contact Wipro Please fill the required details to access the content Wipro Insights Wipro Insights Wipro set up the Council for Industry Research, comprising of domain and technology experts from the organization, to address the needs of customers. It specifically looks at innovative strategies that will help them gain competitive advantage in the market. The Council in collaboration with leading academic institutions and industry bodies studies market trends to equip organizations with insights that facilitate their IT and business strategies. Email us at: wipro.insights@wipro.com =========

### Data Preparation - the 'NEW' element of the data economy

---- Arcticle source ---- https://www.wipro.com/blogs/wipro-insights/data-preparation---the--new--element-of-the-data-economy/ ---- About The Author Contact Wipro Please fill the required details to access the content Data Preparation - the 'NEW' element of the data economy July | 2016 Data is an essential asset of all organization. Today, with technological advancements, data comes from umpteen number of disparate sources. Experts now point to a 4300% increase in annual data generation by 2020, of which 80% is unstructured data in the form of audio recordings, PDFs and texts. This data explosion is resulting in the creation of an overwhelming Data lake. IDC suggests that about 90% of this data is 'dark' and unstructured. In fact,

companies use only a mere 12% of the available data to derive business insights and the rest are just stored as there is no proper means to access this data. This also means that the process for the data to run through its lifecycle, is quite elongated as of date. Gartner research suggests that by 2018, 90% of the deployed data lakes would be useless as they are overwhelmed with information. However, companies spend millions of dollars in storing this data in the repository. This growing need for fast data discovery has been identified by companies like Paxata, Trifacta and others. They provide a self-service Data Preparation Tool which 'swims' through the huge data lakes to fetch all the relevant data and helps analysts by providing clean, standardized and enriched data set collated from various data sources. According to New York Times, Analysts spend about 80% of their time in preparing data. These tools would thus bring a revolution in the world of analysts by helping them save a lot of time and efforts. These tools are dynamic and visual with great user-interface with additional capabilities of smart-data discovery, in-built semantic library, data quality assurance etc. The current market size of Data Preparation market is about \$460 million and it is expected to grow at an estimated CAGR of 16.6%. It has been predicted that between now and 2020, spending on self-service visual discovery and data preparation tools will grow 2.5x faster than similar traditional IT-controlled tools. There has been guite a roar about data preparation tools undoing the dependency on IT. But is this really possible? Does Data Preparation shrink the scope of IT services industry or does it open up new doors of opportunity? In our opinion, IT services would serve as an enabler to these Data Preparation tools. These tools just provide a platform to collect data from various sources and further cleanse it. They cannot replace the need for formal / traditional data governance programs and robust data integration / extraction, transformation and loading solutions. They do not provide the expert advice to derive the right business insights. Services industry has a huge talent pool of SMEs with relevant domain knowledge and industry experience to help bring right insights hidden in the data. Another issue is that there are a lot of players in the data preparation market and hence, the small and nascent tool vendors would not be able to attract the customer competing with the market leaders. They need help of system integrators who have a huge trusted client network to sell their service and gain market share. What are your thoughts? Wipro set up the Council for Industry Research, comprising of domain and technology experts from the organization, to address the needs of customers. It specifically looks at innovative strategies that will help them gain competitive advantage in the market. The Council in collaboration with leading academic institutions and industry bodies studies market trends to equip organizations with insights that facilitate their IT and business strategies. http://www.wipro.com/insights/ Email us

at: wipro.insights@wipro.com ================

### No strings attached: Has wireless charging truly arrived?

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/nostrings-attached--has-wireless-charging-truly-arrived-/ ---- About the Author Contact Wipro Please fill the required details to access the content No strings attached: Has wireless charging truly arrived? April | 2013 Imagine your smartphone runs out of battery at a restaurant. Instead of hassling with a bulky charger, you simply place your gadget on a table and walk away. An hour later, your phone is fully powered up through the table-top, thanks to the wireless charger placed beneath the table. That's the power of wireless technology. Much like Wi-Fi and Bluetooth, wireless charging promises to revolutionize the way consumers use their mobile devices. Recently, market research firm IHS predicted that almost 100 million devices that support wireless charging could be in the market by 2015, as compared to the 5 million sold in 2012. A host of consumer electronics manufacturers and battery companies are already betting on its success and are distinguishing their latest models with wireless charging options. Be it mobile phones or home appliances, wireless charging is set to become ubiquitous with a range of applications. Therefore, it becomes imperative to ensure that charging is standardized. The Wireless Power Consortium (WPC), a conglomerate of manufacturers working to create a global standard for inductive charging, has already developed a new standard called Qi (pronounced 'chee'). As such, it lets you charge any Qi-enabled electronic device on a Qi inductive charging mat, without plugging it in. Since its launch, over 30 companies have shipped mobile phones using the embedded wireless charging capabilities of Qi. In fact, wireless charging is expected to gain significant momentum in 2013. Recently, a slew of wireless charging products comprising smartphones, multi-phone charging pads and tablet chargers grabbed a fair amount of attention at the 2013 Consumer Electronics Show (CES). The 2013 Toyota Avalon, the first car ever to offer wireless charging with a Qi-powered console under the dashboard, was among the most popular wireless innovations on display at the event. Meanwhile, wireless charging stations are increasingly being tested at restaurants, coffee shops and airport lounges. For instance, Nokia has partnered with The Coffee Bean and Tea Leaf to bring table-top charging stations to select locations of the coffee chain. Similarly, Powermat, part of Duracell and Proctor & Gamble, had earlier tested wireless charging spots at Starbucks in Boston and plans to expand nationwide this year. In a world where people are always on the go, wireless charging is surely catching on. Have you joined the wireless revolution yet? Wipro Insights set up the Council for Industry Research, comprising of domain and technology experts from the organization, to address the needs of customers. It specifically looks at innovative strategies that will help them gain competitive advantage in the market. The Council in collaboration with leading academic institutions and industry bodies studies market trends to equip organizations with insights that facilitate their IT and business strategies. http://www.wipro.com/

### Leadership in the Time of

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/ leadership-in-the-time-of-technological-turmoil/ ----- Contact Wipro Please fill the required details to access the content Leadership in the Time of Technological Turmoil June | 2017 There is something that binds Richard Branson, Elon Musk and the Dalai Lama. I believe it is their bold and influential brand of thought leadership. This is the kind of rule-breaking and disruptive leadership we need to emulate: The kind that is both astute and authentic in its approach to problem solving; the kind that is not afraid to take impossibly hard decisions. Only then can we expect truly remarkable breakthroughs: space tourism, driverless cars and a world that places conservation above consumption. Visionaries like Branson, Musk and the Dalai Lama are changing the world through their brand of leadership. They provide us the inspiration to expand our own vision. They encourage us to examine data with wondrous eyes and to come up with transformational ideas. Above all, they show us that it is possible to place compassion above commerce and yet emerge winners in business. Their ideas don't evoke an "aha" moment. They evoke complete incredulity. This is not surprising for these ideas are not meant to make money, they are first meant to change the planet. And, as everyone knows, you can't change the planet through incremental change that improves an algorithm here and a silicon wafer there. Changing the planet begins with a strong foundation of transformational thinking. Investments, talent, management, data, algorithms, bots and markets follow. Take technologies like Artificial Intelligence, Augmented Reality, Virtual Reality, 3D printing, Internet of Things, blockchain, facial recognition, quantum computing, wireless charging, drones and botnets that are mainstreaming (yes, botnets are back with a vengeance - be very afraid of the dark power of the Botnets of Things). These technologies will never let the world stay still again. They have set the wheels of turmoil in perpetual motion. Combine 3D printing with sensors that are surgically wired to nerves and you have prosthetics with a sense of touch. Combine drones with hyperspectral imaging and methane sniffing capabilities and you can send them off to explore places so dangerous no man would dare go. Notice how the world of possibilities and values expand at the intersection of technologies and data streams. To convert the vision of the emerging breed of new age leaders like Jeff Bezos, Jack Ma, Vijay Shekhar Sharma and Brian Chesky, we need expertise and experience that will flawlessly integrate and stitch these technologies and data streams together into a handsome tapestry of the future. Today, harnessing these diverse technologies is at the core of translating leadership vision into reality. This is what makes recommendation-driven shopping, digital wallets, algorithmic trading, mobile healthcare, digital governance, space tourism and solar powered autonomous cars-things that consumers absolutely love and crave-possible. Admittedly, there is no single person, company, organization or think tank that can hope to bring the philosophical depth but practical and industrious application required to achieve such

### What is the place of AI in

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/what-isthe-place-of-ai-in-leadership-/ ---- Contact Wipro Please fill the required details to access the content What is the place of AI in leadership? August | 2017 We have seen leaders who are charismatic, visionary, inspirational, motivational, intellectual, strategic, democratic and facilitative. While styles differ, leaders need build on a vision, possess high integrity, be transparent while building trust and possess the ability to take others along on their journey. However, the tools to execute that vision, maintain integrity and transparency, influence people and build a better planet are evolving with technology. Today, the world and businesses need transformational leadership and successful transformational leaders are relying on technology. Is it any surprise that when global leaders from governments and industry meet at Davos each year at the World Economic Forum, the key discussions are around technology? While Art and culture, social inclusion, economics and trade, education, food security and gender balance are relevant, every discussion gravitates towards technology. World leaders want to know how blockchain can help create more trusted and frictionless transactions, they want to know how bioluminescent algae can be used to meet energy and lighting needs, how water can be harvested from air and how artificial intelligence (AI) can diagnose cancer, prevent complex attempts at fraud Among other things, AI gives world leaders the power to make the world a safer place, and augment the capabilities of the workforce to deliver exponential gains GDP. And yet, today's leaders are struggling with the idea of an AI First World. They view the approach of Technological Singularity, where autonomous machines enter an infinite and rapid cycle of self-learning and improvement, with suspicion. The belief is that super intelligent bots will destroy jobs and trigger social turbulence. This makes us ask: "What is the place of AI in leadership?" Leaders have always wanted to augment the capabilities of their workforce. Without doubt, AI presents the most potent opportunity to achieve that. When combined with new technologies like Augmented Reality (AR), Virtual Reality (VR), Cognitive Process Automation (CPA), Neural Networks, Natural Language Processing (NLP) and Machine Learning (ML), leaders possess the most powerful tools known in history to drive extreme transformation. Leaders will need to adaptively structure their organizations and adopt new training methods to prepare employees to collaborate with machines and bots. They will need to resolve a unique leadership challenge: To wed Human Capital management with AI Capital management. Once AI is integrated into organizational processes it should improve productivity while simultaneously improving employee engagement and experience. The two go hand in hand. While there will be resistance to any change and uncertainty, it will bring us a

### The magic of convergence

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/themagic-of-convergence/ ---- Contact Wipro Please fill the required details to access the content The magic of convergence December | 2017 For many years now, analysts and experts have been talking about technological convergence—the stuff that happens when the applications we use to communicate, shop, learn and entertain begin to fold into one another; when devices like computers, tablets, mobile phones, cameras, smart watches, television sets, and speakers become interchangeable; when things like elevators and light bulbs, power supply grids and emergency alarm systems, rockets and robots get connected. Technology and engineering have been connecting these seemingly disparate things at an increasingly faster pace, giving rise to new products, services, business models and customers. Today, no business can ignore the power of convergence. The convergence that brings together two or more sectors to share their knowledge and technology base (and even perhaps share their customer base) has become the elixir for innovation. Convergence is what makes dramatic and disruptive new products like autonomous vehicles possible. The trend is forcing a vast variety of organizations—technology providers, government administrations, regulators, manufacturers, communication and network providers, sensor and application developers, etc.—to come together, brainstorm, collaborate and develop. If we were to hold a magnifying glass over the change, we'd notice that the big shift is from developing killer platforms to stitching together killer ecosystems. Digital wallets are an excellent example of piecing together an ecosystem of acquiring banks, issuing banks, card-on-file merchants, customers, transaction standards, digital infrastructure, communication networks and security systems to enable faster, cheaper and more reliable transactions. For sure, convergence is producing enchanting results. But more than the wonders it is creating such as digital wallets and self-driven vehicles—the convergence is helping create safer and stress-free societies, better adherence to laws, more efficiency, predictability, transparency, lowered costs and wider access to convenience. Did we mention convenience last? It should have come first. Because, ultimately, it is how the end consumer is impacted that will determine the outcome of convergence. In our opinion, human-centered design and design thinking take on extraordinary importance in a world of rapid and tumultuous convergence. It is considerably easier to bring together disparate products or businesses - say a ride-sharing service, logistics, food delivery and a mobile payments platform - than it is to create something that customers will love. A hurried blend of technologies,

platforms, service areas and products could translate into a risky investment, trapping partners in an irreversible spiral of enhancements, tweaks, and upgrades. In other words, bringing together two or more proven and successful ideas/processes/technologies/systems/products may not always result in greater success. Just as convergence brings partners to share their knowledge and technology, it is human-centered design that helps connect the new products to customers. We must be able to design new products from the eyes of our customers, understand their motivations, address their latent needs and tie it in with the emotional experiences they desire. In other words, empathy is the glue between products and customers —it defines and shapes and customizes products. There is an urgent need to step up the bold magic of convergence within organizations. It is equally important that organizations not get too caught up in developing elaborate technologies, platforms and extravagant product portfolios. Instead, the focus should be on partnerships and ecosystems bound together by humancentered design and design thinking to make a successful go of it. www.wipro.com/blogs/wipro-insights/covid-19-updates/ ----- Contact Wipro Please fill the required details to access the content As of - August 26, 2021 The COVID-19 has compelled organizations to tide over cultural and technological barriers to expedite the structural shift from physical inperson working to remote working. The information technology industry, with its distributed workforce, has adapted well to the demands of the new reality, delivering services seamlessly amidst the challenges. In addition, a geographically dispersed workforce helps significantly mitigate the impact of the pandemic on employees. Recent studies show that in future, a hybrid working arrangement that allows for greater flexibility will be a critical factor that would influence employee preferences. As a first step in this direction, we will adopt a flexible, hybrid approach in our return to office policy. In the first phase, senior leaders who are fully vaccinated will return to work from offices in India, twice a week, effective Monday, September 13, 2021. It is important to note that the number of COVID cases have declined in India while the vaccination drive has gained significant momentum, allowing us to put in motion our return-to-office plan in a calibrated manner. However, we have extended the work from home arrangement for all other employees until October 31, 2021. We will take decisions based on situation of the pandemic in consultation with the employees. Each of the countries we operate in similar approach is considered, depending on the pandemic situation and local guidelines. Enhanced safety measures at offices The safety and wellbeing of our employees will continue to remain our foremost priority. We have greater focus on measures like workplace sanitization, strict social distancing practices, and vaccination, to ensure employee safety. Here are the region-wise highlights of our global operations: AMERICAs: USA, Canada & LATAM APMEA - Asia Pacific Middle East & Africa ASEAN & Japan ANZ China India Middle East Philippines South Africa Europe We are continuing with restrictions on travel, customer visits, and physical gatherings, until further notice. Our global Environment, Health & Safety (EHS), and crisis management teams are monitoring the situation around the clock. We are committed to supporting our customers and partners in these unprecedented times and will do our best to ensure a safe work environment for all our stakeholders.

www.wipro.com/blogs/wipro-insights/continuity-is-the-management-word-ofthe-hour/ ---- Contact Wipro Please fill the required details to access the content "Continuity" Is the Management Word of the Hour April | 2020 What do companies do when things go wrong? We're seeing the answer in real time, all around us, during this challenging and difficult moment. But it's not a question managers ask themselves often enough in ordinary times. As we all struggle to cope and keep our teams healthy and focused, company leaders need to start thinking about the potential challenges their organizations might face and how to keep them running when disruption hits. We are entering a new era where organizations must be prepared to continue normal operations from anywhere, no matter the crisis. Business continuity planning (BCP) is an entire discipline of strategy and management that has inspired countless books. Continuity—how to continue your company's operations no matter what happens—focuses on several key areas. Managers need to be prepared to pivot in any of them when necessary. Effective BCP requires companies to have contingency plans in the event of disruptive scenarios, especially for these key areas: employee productivity, supply chains, technology systems and infrastructure, and, of course, ensuring that products or services remain available to customers. Yet in many ways, the current crisis challenges the traditional understanding of BCP, largely due to entire workforces being required to work from home (WFH). Business agility has become even more important. Ensure your people can keep working. Keeping your people productive is the numberone continuity challenge. It's obviously in the forefront of every manager's mind at this very moment, as COVID-19 sweeps through global society. Virtually nobody is working as they have before. Nearly every company has enabled WFH for their employees including Wipro where over 90% of employees now WFH and continue to serve clients without interruption. Enabling over 150,000 employees for remote working with the right technology and systems doesn't happen without agility, commitment, passion, and global scale. And it's not even just about IT support. Some companies have a culture that makes it easy for people to switch modes and work out of the office. Others do not and must go through extensive adjustments when working from home becomes necessary. Human Resource teams have had to adjust or create policies overnight to support these new work arrangements. Protect your supply chain. One of the first business consequences of the COVID-19 crisis was the disruption caused when Chinese factories stopped operating. Companies around the world found themselves at least partially paralyzed, sometimes for want of just one relatively minor component. As a consequence, one of the most widely discussed predictions for the "new normal" when the crisis recedes is that production may move physically closer to the end consumer. The initial and still sometimes serious shortages of important medical products, ranging from masks to drugs, normally produced primarily in China, reinforce the likelihood we will soon see massive change in this arena. How much thought have you given to potential vulnerabilities in your company's supply chain? The issue quickly dovetails with the first point about employees. Since production around the world is now idled, with workers asked to stay home, many companies will inevitably accelerate plans to automate future plants. The factory of the future may be close by, but it may also be filled with robots. Transform IT and operations. How many corporate IT professionals have spent much of the last month frantically educating staff about how to

use videoconferencing and remote working technologies, and reinforcing the back end of such systems? Let's just say it's been a large job. Although many companies (though by no means all of them) have longstanding dataprotection and backup facilities, they've given little thought to how they would function electronically if the office became a ghost town. One of the great assets of the modern global IT ecosystem is the vast availability of ondemand assets, which have become all the more essential during this crisis. But companies that have resisted moving data operations to the cloud are regretting it, and remote service providers are finding themselves so overtaxed that they're imposing new limits on usage. For the leadership of almost every company, it's sinking in that the more digital they are, the better they will do in times of uncertainty. Many experts predict that the post-COVID era will be way more digital than the one that ended with the arrival of the outbreak. According to a Wipro Digital survey of 1,400 executives, it's not too late for those who might be behind in their digital journeys. So perhaps the ultimate advice on how to achieve better agility, resilience and continuity is to accelerate the process of digital transformation. Ensure customers can still buy your products and services. Getting the employee, production, and IT issues right will contribute mightily to that all-important matter of ensuring customers still can buy and use your products or services. From helping banks roll-out COVID-19 loan products for impacted customers to making sure a global logistics company could continue delivering life-saving medical equipment and COVID-19 testing kits or to keeping a major airport open for commercial flights and cargo delivery (a key part of the supply chain), Wipro provided the necessary support, in a matter of days, so clients around the world could continue serving their customers - while everybody worked from home. None of the considerations we've discussed here will be required only in this period of pandemic crisis. Companies need a well-developed continuity plan just as much as a plan for cybersecurity incidents, natural disasters, unexpected geopolitical tension, or even warfare and social unrest. There is no reason the current pandemic might not eventually be accompanied by one or more of these parallel challenges. We are without guestion entering an era with more challenges than ever to business continuity. Preparing for disruption is a key part of an executive's job. It may seem peripheral on an ordinary day in an ordinary year. But the companies that take BCP seriously will be the ones, long term, that thrive. =================== ----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/aienabled-robots-minimize-up-close-interactions-between-healthcare-workersand-patients/---- About the Author Contact Wipro Related Blogs MESC 2022 Reflections: MMIS Modernization and Its Value to States E-Labelling: A regulatory mandate ensuring ease of business The Future of Well-Being: How Tech Will Impact Employee Healthcare Benefits Please fill the required details to access the content AI-Enabled Robots Minimize Up-Close Interactions Between Healthcare Workers and Patients April | 2020 Thanks to advances in artificial intelligence and robotics, patient care has a new face: AI bot nurses. They can run errands, assist patients with medications, and supplement routine patient-care tasks. These robots can help ease the burden on healthcare systems — both in times of calm and in times of global healthcare crisis. Pandemics present an important use case for robotics in healthcare. When the world is facing a pandemic, it's critical to reduce unsafe interactions between medical professionals and patients. The SARS-

CoV-2 virus has an infection rate of 2 to 2.5 people. That's nearly double the infection rate for the flu, which has an average spread of 1.3 people. That higher likelihood of infection is impacting the medical professionals on the frontline, with daily reports of nurses and doctors falling ill from the novel coronavirus. Provider-patient interaction is even more risky now, due to personal protective equipment shortages. The problem remains: Doctors, nurses, and staff members still need to interact with patients to provide proper care. But how is it possible for healthcare workers to flatten the curve while providing adequate care? Here's where robots come to the rescue. Human and machine collaboration for smarter healthcare Along with AI and machine learning, robotic technology can revolutionize hospital caregiving. In times of global pandemics, robots in healthcare can minimize face-to-face interactions between medical professionals and patients, creating the safest possible environment. In addition, robots don't face the constraints of the human body: Robots don't fall ill, they don't need to sleep or leave the hospital, and they are not prone to human error. However, robotics in healthcare is not only useful during crises. Healthcare systems around the world have been finding ways to integrate robot helpers into normal patient care. Robots can supplement healthcare work in the following major ways: Beyond complementing direct patient care, there are many other ways robots can support healthcare systems. Other robots can be put to work by sorting, sanitizing, and delivering medical supplies to different departments. This aid can be invaluable during a pandemic such as COVID-19; the less human hands that touch an item, the better. Even though there are many benefits to integrating robots into the global healthcare system, AI-enabled robots can't replace human-provided care. Instead, the robots perform routine tasks in order to free up time and energy for humans to focus on more essential duties. In Moxi's case, nurses were able to send the bot to complete chores so they could spend more time providing more specialized care. Freeing up space in providers' mental capacities is valuable no matter what problems they're tackling. How AI-enabled robots help healthcare systems provide better patient care These bots are not just concepts or prototypes. Robots have been aiding medical professionals across the globe during the COVID-19 pandemic, and we're only witnessing the beginning of their potential to revolutionize healthcare in the long term. Here are a few ways robotics have impacted healthcare during the COVID-19 pandemic: 1. Temperature-taking robots Fever is one of the most prominent symptoms of the novel coronavirus, so taking every patient's temperature quickly is crucial. Still, it's a potential exposure point for frontline healthcare workers. The Smart Field Hospital in Wuhan, China, utilized robots to take incoming patients' temperatures with 5G thermometers. Then all patients were outfitted with smart bracelets and smart rings that monitor temperature, blood-oxygen levels, and heart rate. That information was pushed to doctors so they could review it and check for abnormalities. These smart devices relieved medical professionals from routine vitals checks, keeping doctors and nurses from direct contact with sick patients. Bot nurses can do what no medical professional can -- safely keep tabs on patients and alert nurses and doctors when there's an emergency. 2. Delivery robots Robots provide a human-less option for laststep drug and food delivery to hospital patients, which can be vital in pandemic situations. A robot named Little Peanut delivered food to flight passengers who entered China, minimizing person-to-person contact. The

robot even spoke to those in quarantine, letting them know how to message the staff using WeChat if they needed anything else. Smart Field Hospital also utilized these robots to deliver meals and medicine, limiting the amount of time doctors and nurses spent in patients' rooms. When medical facilities are full, robots are a valuable, time-saving solution. 3. Robots for teleconferencing Healthcare workers involved in the U.S.'s first case of COVID-19 at the Regional Medical Center in Washington relied on robot teleconferencing. Doctors could communicate with the patient and take vitals, like listening to the heart and lungs -- in isolation through the robot. This technology allows providers to ask questions and listen to the patient while maintaining a safe distance and preventing viral spread. 4. Robot cleaners UV light robots disinfect high-risk infection areas before hospital personnel begin to sanitize rooms or change bed sheets. China and Italy deployed these bots to limit the spread of COVID-19. The robots emit a powerful UV light that can tear the virus DNA apart. On just one charge, the bots can disinfect 9 to 10 rooms. The robot reduces risk for medical staff and future patients, as well as speeding up the time it takes to prepare rooms when the system is overburdened. The healthcare system continues to improve its ability to deliver safe and comprehensive care. Robots are becoming a bigger piece of that puzzle, especially in times of crisis. And while robots have proven their value in hospitals by reducing face-to-face time with patients and still giving patients the quality care they need to recover, these examples are just the beginning for the possibilities of robotics in healthcare. At Wipro, we have the capabilities to meet hospitals' needs by providing robots and customizing their artificial intelligence and hardware. Interested in learning more? Let's talk. Industry: This year's event was the largest gathering in the history of the Medicaid Enterprise System Conference (MESC) according to the New England State Consortium Organization (NESCO), the organizers of the event. Label and artwork management in medical device companies are still seen as an afterthought and therefore, there is not enough concentration as well as investment in this area. However, with new updates such as traceability (UDI) and elabeling, companies are compelled to invest time and money to be compliant on the regulations required. The employee healthcare benefits reckoning is here. The enduring impact of COVID-19 has converged with digital transformation - especially the accelerated advancement of data collection and analytics - to create sweeping changes in employee-employer relations. The chaotic pace of change in managing remote workforces and retaining top talent has placed an enormous strain on employers. Meeting bottom lines while addressing significant increases in employee healthcare costs and premiums can become an existential struggle.

### Social is the Way for Telcos

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/social-is-the-way-for-telcos/ ----- Contact Wipro Please fill the required details to access the content Social is the Way for Telcos March | 2014 The world is going social. People and businesses are now using social media as a key conduit for interaction, collaboration, and commerce. And telecom service

providers have been instrumental in promoting this global social revolution. But where are they in their own adoption of social media and integrating it within their own core systems? A recent study by Lithium Technologies found that telcos globally still view social media as new and challenging, especially in the APAC region: they have not yet fully implemented it or enjoyed its potential benefits. So what are the benefits a typical telco could realize by fully adopting and implementing effective social media practices throughout its enterprise? The positive impact would be felt in three broad categories: Given the many benefits of using social media, what's the best way for telcos to transform social media efforts into quantifiable business benefits? Social media adoption goes beyond regularly posting on your Facebook page or Twitter—it involves listening to customers on the social sites and responding quickly to their comments and concerns. Many telcos like Bharti Airtel, Telecom Italia, AT&T and Verizon are doing a fabulous job engaging customers on social sites, with an average response time of 1-4 hours. Others, like China Telecom are effectively collecting feedback, such as new ideas, from customers frequenting the social sites. The next step is to create self-sustaining social hubs that enable people to interact with and support each other on these platforms. While companies like Apple and NSN are doing an excellent job creating self-sustaining social hubs, telcos have yet to leverage social platforms for internal use to transform the way people work and collaborate. We believe telcos have to adopt social media as a new way of operating rather than just a technology intervention. Telco social media efforts should include: When telcos look at social media as a transformative new way of working, that's when they'll begin to reap its true 

## Is This the Dawn of the Real Machine Age?

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/is-thisthe-dawn-of-the-real-machine-age-/ ---- Contact Wipro Please fill the required details to access the content Is This the Dawn of the Real Machine Age? February | 2014 As more and more machines and things we never imagined could communicate via the Internet actually are, newer possibilities and horizons are opening up. This ability, called the Internet of Things, or the Internet of Everything, is revolutionizing the way we communicate and interact with machines and vice-versa. Two breakthrough advances that could propel us into a new revolution have recently picked up speed - Industrial Automation and the Connected Home. Let's look at Industrial Automation first. AT&T and GE recently expanded their partnership to add wireless capabilities to a wide range of GE's industrial machines. Through secure machine-to-machine (M2M) communications, it will soon be possible for millions of these machines to be tracked, monitored and operated remotely in real-time. The M2M connectivity will be enabled by AT&T's network and cloud. This is just the beginning of a trend which will soon be the norm - more and more Internet connected machines. Already 15 million+ machines are connected via AT&T's network, driving

operating efficiencies and productivity to new levels. AT&T has estimated that specially designed products and M2M solutions can save the airline industry up to USD \$90 million over five years. Looking only at industrial machines like - turbines, jet engines, manufacturing, agriculture, oil & gas production etc. - some analysts predict the market size will reach USD \$514 billion globally by 2015. This emerging market holds enormous potential to optimize industry productivity on a global basis. When combined with technologies like advanced analytics and the connectivity of the cloud, the M2M revolution will mean significant new revenue opportunities and improved network monetization for telcos. For telco customers, M2M will mean reliable service, better value and an improved experience overall. The other big M2M opportunity, of similarly gigantic proportions, is the consumer household market. The concept of controlling the essential functions of a house - lighting, door locks, water supply, security systems and entertainment devices - remotely via the Internet is not new. Known as Home Automation, the concept got a real shot in the arm in the last couple years as telcos like Deutsche Telekom and Telstra placed bets on this market and start-ups like Quirky amassed funding According to ABI Research, connected home devices could reach a global market value of USD \$10 billion by 2014. Application vendors and consumer electronics players are partnering like never before to harness the true potential of the opportunity. With the rise of the digital consumer and the increase of disposable incomes in emerging markets, it's likely that the adoption will be swift. Google recently bought device maker NEST for \$3.2B. They may have overpaid since it does not seem NEST has that kind of defensible technology. This also gives rise to further privacy issues...invasion of the home!! There is no doubt about the vast potential these technologies represent. The invention of manufacturing machines ushered in the Industrial Revolution. What sort of revolution will intelligent, self-communicating machines bring about? We 

### Market power shifts to Internetenabled open platforms: What should TMT companies do to succeed in the new digital order

---- Arcticle source ---- https://www.wipro.com/blogs/wipro-insights/market-power-shifts-to-internet-enabled-open-platforms--what-sho/ ---- Contact Wipro Please fill the required details to access the content Market power shifts to Internet-enabled open platforms: What should TMT companies do to succeed in the new digital order March | 2012 I recently had the opportunity to work with Kevin Werbach from the Wharton Business School of the University of Pennsylvania. Kevin's work is focused on the intersection of business, law and technology and how these areas apply to digital convergence in the media and telecom industry. In an article we recently published together, we analyze the market trends and technologies that are reshaping the future of Telecom, Media and Technology (TMT) industries.

We note that recent technology advancements, rapid uptake of smart devices and the pervasiveness of the Internet have had a profound impact on the TMT industries. If you look at these markets, it is noteworthy how new age technology companies are disrupting the value chain with their suite of innovative products and services. Think of Google, Amazon, and the likes, their success illustrates that we have moved from an era of closed, controlled business environments where innovation was limited to select owners of proprietary resources, to an open eco-system thriving over the ubiquitous Internet platform. TMT players have to accept that we are living in a new digital world, where size does not really guarantee success. Disruptive services such as You Tube, Skype and Netflix have completely changed the dynamics of the business. The growth in bandwidth consumption to accommodate an insatiable consumer appetite for video content has not necessarily generated new revenue for telcos. Therefore, TMT companies must reduce their reliance on proprietary metered business models and adopt new flexible business models. Although, many TMT players have already started their transition journey, they are still struggling to live with these new realities. We also analyze how the wide-scale adoption of smart devices, social networking and wireless mobility is creating many new opportunities as well as challenges for TMT players. We explore these market dynamics in detail and also look at some of the exciting new telco market opportunities such as location based services, M2M, cloud services and analytics. There is a lot in store for TMT players in this era of flux, and as you read, you will come across some interesting findings and approaches that may change the way you think about these markets. Thanks for reading and I look forward to your feedback on the piece...

### M2M business planning - what is holding back market growth?

---- Arcticle source ---- https://www.wipro.com/blogs/wipro-insights/m2mbusiness-planning--what-is-holding-back-market-growth-/ ----- Contact Wipro Please fill the required details to access the content M2M business planning - what is holding back market growth? August | 2012 Several weeks ago, I attended the AxedaConnexion 2012 industry conference as a panelist for a discussion that explored next-generation connected products and M2M solutions. Axeda is a Wipro partner and offers a compelling M2M platform. The event was well attended with participants from AT&T, Cisco, SAP, SalesForce and many other influential players in the M2M market. I am a believer in M2M, but caution that the market will not take a big leap forward until compelling industry specific applications emerge. These types of solutions will require tight integration with business systems. The growth in connected devices and the potential of this market is undeniable. And with a Telco-Media Industry that is desperate for new sources of revenue, the hype surrounding M2M is understandable. Yet, adoption has been slow. I believe there are four factors that have held back market growth: In summary, I perceive a disconnect between technology and business

### Tips for addressing the broadband challenge

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/tips-foraddressing-the-broadband-challenge/ ----- Contact Wipro Please fill the required details to access the content Tips for addressing the broadband challenge April | 2013 The US is one of the most mature fixed-broadband markets in the world, but is becoming a victim of its own success. Communication Service Providers (CSPs - both telecom and cable MSOs) enjoyed a long run of double-digit growth in building the networks and services that power triple-and-quad play packages, but that growth has stalled out with broadband penetration rates approaching 70%. In response, CSPs have logically expanded their media content offerings and begun experimenting with new connected home and enterprise machine-tomachine. solutions. But we believe there is still headroom for basic access growth both in the US market and beyond. The broadband challenge: Historically, CSPs have had difficulty tapping into underserved, less internet-savvy, and often unbanked or under-banked market segments in a profitable manner. Given issues of churn, service coverage, bad-debt and high support costs of the remaining 30% of the market, CSPs have until recently focused elsewhere to drive growth. But the tides are shifting. First, the main US Federal communications regulatory authority, the Federal Communications Commission (FCC) has clearly shifted its focus of the Universal Service Obligation from support of telephony and simple extension of broadband service into rural areas, to a primary emphasis on the provisioning of affordable broadband services in these underserved communities. And second, with growth rates slowing, CSPs are now willing to consider creative market approaches that will allow them to tap into the potential offered by these underserved market segments. Changing the dynamics of how CSPs look at the market: At Wipro, we believe the key to profitably serving these households is with a pre-paid broadband service offering flexible price points, differing service levels than the premium 'allyou-can-eat' products and capabilities that allow consumers to better manage their spend. Why pre-paid? The simple reason is the same one that has driven mobile carriers globally to take up this business construct in that it eliminates the credit risks associated with a postpaid business model. Additionally, it gives CSPs a way to save the customers today, who are disqualified for non-payment and blacklisted from service - consumers that will never return to the brand. And, until the recent penetration plateau, along with subsequent migration towards cord-cutting smartphone-based consumers, CSPs haven't felt the need to change from the postpaid model for growth. It is for these reasons that Wipro has made a major investment

in Wipro Accelerate<sup>™</sup> - a managed service offering which provides end-toend billing, service management and customer care solution for broadband service providers. Our service includes: CSPs today often struggle with changes to operations that would enable a cost-effective pre-paid broadband product overnight. Decisions on product packaging, pricing and back-end systems/ call center integration can take time. But, with Wipro Accelerate™ offering a template for rapid and cost-effective launch, our customers can dramatically streamline the typical product launch cycle with a strong business proposition and operational template. While we believe there is immediate, pent-up demand for this solution in the North American market today, we are actively promoting it in other geographies as well. By leveraging our depth of expertise from running live carrier operations in India, the world's largest pre-paid communication market, we have business and technical expertise that few providers can match. If you have thoughts on the opportunity and potential for prepaid broadband services in developed markets such as the US, I'd love to hear your feedback in the 

### Do system integrators hold the key to M2M monetization

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/dosystem-integrators-hold-the-key-to-m2m-monetization/ ---- Contact Wipro Please fill the required details to access the content Do system integrators hold the key to M2M monetization December | 2012 In my last blog post, we examined some of the barriers which are holding back market growth for M2M as a new revenue opportunity for Telcos. Some of the key challenges the industry is facing include the complexity of eco-system due to market fragmentation, absence of enterprise ready applications, lack of proven business case and post-deployment management issues. In this post, let's consider how System Integrators like Wipro can help telecom operators overcome some of these challenges. M2M is a rapidly evolving phenomenon and operators are still figuring out the best way to realize its full potential as the new revenue stream. Action on the M2M landscape has shifted from individual players talking about themselves to a partnership based approach. While this signals growing maturity of M2M as technology, the landscape becomes even murkier with lack of standardization and an unclear approach to delivering impactful benefits to enterprise customers. More and more of these services are aimed at streamlining enterprise customers' internal operations rather than enabling them to unlock new sources of revenue. In addition, there seems to be no focus on development of industry-specific vertical applications. Under such uncertainties, what can a Telco do to ensure that it doesn't miss the bus on M2M revenue realization? The answer to this question lies in re-evaluating what they can offer to their enterprise customers aside from basic connectivity and a limited set of integration and managed services. As I contemplate more and more on this subject, one thing becomes clear; system integrators (SIs) are poised to play a critical role in the M2M value chain: The industry is headed

in the right direction, and SI's are already playing a crucial role as facilitators. A crucial next step is collaboration between telcos and SI's to establish some successful POCs. In this series of blog posts on M2M, I will keep writing more as the market and landscape evolves for M2M.

# Consumerization of technology in the media and communications industry

---- Arcticle source ---- https://www.wipro.com/blogs/wipro-insights/ consumerization-of-technology-in-the-media-and-communications-in0/-----Contact Wipro Please fill the required details to access the content Consumerization of Technology in the Media and Communications Industry June | 2012 Due to dramatic advances in computing and communication technologies, disruptive innovations can now happen anywhere, at anytime. I recently wrote an article on the Consumerization of Technology in our quarterly journal 'Winsights'. In it, I present a closer look at how the business-led innovation dynamic has flipped and the most innovative technologies are now emerging from the consumer side. In fact, it is the first time in our history that consumers are leading the way in terms of both technology adoption and spend. Over the past decade, technology development has enjoyed a period of unbridled productivity as development barriers have come crashing down. Innovation is no longer limited to costly R&D labs guarded by the mighty owners of proprietary resources. Today, consumer trends are driving the development of technology. The communications sector in particular has witnessed one of the fastest phases of technology advancement over the past decade. We have quickly moved from 2G standards to 3G/4G and IP based services such as Skype, Google Talk and FaceTime have revolutionized the way in which family and friends stay in touch. Driven by the popularity of these services, unified communications (UC) including VoIP, instant messaging and video conferencing are now extensively used in business enterprises as collaboration and productivity enhancement tools. In the present era of globalization, collaboration becomes one of the most critical factors for success. And tele-presence, voice and video chats are helping people collaborate better by transcending the hurdles of geographical distances and time, offering employees a feeling of being in the same room, as they discuss policies, strategies and big ideas. The advancements in information and communication technologies (ICT) have also paved the way for many new age services. For instance, video conferencing is playing an important role in facilitating e-learning services—allowing subject-matter experts to conduct virtual classes with students from around the world. Telemedicine is also experiencing a boom with the healthcare industry looking to expand into new services areas such as remote monitoring and diagnostics. Consumers' appetite for online content is at an all-time high driven by a rise

### Welcome to the mobile enterprise...

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/ welcome-to-the-mobile-enterprise/ ---- Contact Wipro Please fill the required details to access the content Welcome to the mobile enterprise... August | 2011 For the past decade, technologists have evangelized the impending mobile enterprise application revolution. While there has been tremendous progress in this direction in recent years - it is also true that the revolution hasn't arrived yet. Today, mobile enterprise adoption is primarily limited to basic worker productivity applications such as email and calendaring. But the revolution is just on the horizon and will hit us in the near future. On a personal front, I have recently acquired a tablet device that is already changing the way I communicate and collaborate with my colleagues. Tablets will provide a very rich business computing environment packed into a user friendly and light device. Favorable price-performance will accelerate the widespread use of such devices. In addition, the proliferation of 4G/LTE networks will feed the demands of resource-intensive business-critical applications which were a major bottleneck in the past. Finally, impactful technological developments in cloud computing and even HTML5 will help accelerate enterprise application adoption. These technology developments will address the shortcomings that previously limited the adoption of mobile enterprise applications. Make no mistake, this will rapidly and profoundly change the way businesses interact with and support employee, customer and partner ecosystems. Where does Android fit into the coming revolution? Android has recently overtaken IOS for total user installed base - but its sheer volume of users does not tell the whole story. Android is winning the low-end consumer market. The success of its App Store has been muted and developers are still gueuing up behind Apple. If Android can't conquer high-end consumer market, how can it fare in the enterprise segment? The answer is unclear, but Google and the Android OS are fighting an uphill battle. To stand a chance, Google needs to beat Apple and its heavy investments in popular consumer solutions. It also has to take on RIM's recent tablet offering - the Playbook. HP with its WebOS and Microsoft with its anticipated tablet OS will also join this battle. Android has emerged as a great platform that connects multiple devices such as phones, tablets and smart TVs. But, there are three key challenges it needs to face

before it makes a splash in the mobile enterprise. First, Android must reduce the constant software updates that are endemic to its platform. There are multiple releases of Android, requiring rapid changes in the hardware platforms, frustrating the end-users. As a result, the user often delays these updates and in turn, the QOS of the device suffers as applications become incompatible with the now out-dated version of the OS. The second challenge is the level of differentiation that OEMs will be able to bring to their devices, and the ability to keep them up-to-date across different releases of Android. Operators are nervous about Android since the roadmap to the platform is dictated solely by Google, which is a competitor for some of their revenue sources. The third challenge is the Android platform's perceived security vulnerability. Reasonable security integrity is generally "good enough" for a consumer, but in regulated business environments a robust security platform is table stakes. To join the game, Google must address this shortcoming. Do you think they can? Will Android dethrone the mighty Apple? =================

# Would bandwidth play spoilsport to my mobility dream?

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----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/wouldbandwidth-play-spoilsport-to-my-mobility-dream-/ ---- Contact Wipro Please fill the required details to access the content Would bandwidth play spoilsport to my mobility dream? April | 2011 Today, we are at tipping point, similar to .COM a decade ago that saw a dramatic increase in software awareness and activity. This time around, mobility will crawl into our daily lives directly and indirectly through applications. And this new disruptive wave has already begun. Nearly 50 billion devices are expected to be connected over the next few years and new apps, middleware and communication technologies are forecasted to evolve to make the magic happen. In my last blog, I wrote about smart life, however, for a smart life to become reality one needs to resolve the mammoth bandwidth issue. One needs to ask the question, how can the current LTE experience and capacity on fixed lines be expanded to meet the mobility demand? There is a need for continued evolution of baseband, LTE and RF technologies to support the fast paced connected world. The CEOs of the global Telco operators (Telecom Americana, Vodaphone, Telefonica, ATT, Telecom Italia and China Mobile) all seem unanimous that governments should stay away as much as possible and let the business drive. Investments in M2M, WAC, HTML 5.0, NFC and LTE deployment will be seen. What steps must be taken to overcome the bandwidth bump in our mobility drive

### My Future - A Smart life

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/myfuture- -a-smart-life/ ----- Contact Wipro Please fill the required details to access the content My Future - A Smart life March | 2011 It's a cold morning. I wake up, reach out to the home appliance controls on my bedside, and program the microwave to prepare my breakfast with the right amount of calories. Thereafter, I walk to my closet and pick a suit. My intelligent closet automatically presents a matching shirt, tie, shoes, socks and cufflinks that I had not recently worn! I walk into the living room. The light is perfect, room is warm and window curtains are drawn showing off the beautiful snowcapped mountains. Ah! My smart room occupancy sensor knows the ambience I want. I have my healthy breakfast while watching news on the connected TV. In the midst of it, I get a video call and I need to head to work. I toss the news feed from the TV screen to my tablet and walk to the garage. I switch on the in-vehicle infotainment system in the car to continue hearing the news and drive on. The system then integrates with my smart phone and updates me on my day's meetings. It also helps me reach my destination safely and guickly. Snap! The alarm rings and I wake up from my dream in which my life was 'smart'. Smart life is sure to become the reality in the future; the numerous Android and Windows Phone 7 (WP7) based smart phones, tablets and connected devices with mobility applications for consumers and enterprises demonstrated at the recent MWC & Barcelona I attended, showed we aren't too far away from it. I saw smart devices with neat user interfaces using GPS and Augmented Reality (AR) to build interaction with the external environment. AR is helping seed intelligence into devices like the mobile in a big way making them literally talk to the consumer. LAYAR, for instance, has tried to recreate events of the past for the user. You can go to Brandenburg gate, open the Berlin Wall layer and see how the fallen Berlin Wall comes back to life. Similarly, if you are crossing Abbey Road in London you can see a 3-D image of the Beatles. This is the beginning of smart life - bringing your past, present and may be even future alive! Feel free to share your views on how smart our life will get in the future, thanks to mobility and connectedness.

### **Evolving How We Work**

---- Arcticle source ---- https://www.wipro.com/blogs/wipro-insights/as-tech-changes-after-covid-19-how-we-work-must-too/ ---- About the Author Contact Wipro Please fill the required details to access the content As Tech Changes after COVID-19, How We Work Must, Too When the world changes, a resilient enterprise is key June | 2020 It's an interesting time to be a CTO. All of us, and our organizations, are starting to settle into a very different world than the one we knew before COVID-19. Those responsible for developing, building, maintaining, and evolving technology face a raft of challenges. Working from home is quickly becoming the new normal. Dispersed employees need new kinds of support and tools to collaborate and

work together effectively. While it feels like we're spending much of our day on video conferences, the more capable, purpose-built tools we need don't even yet exist. Meanwhile, new business technologies continue to emerge rapidly, and smart organizations must embrace them urgently. It was challenging enough before the crisis to take full advantage of new technologies like 5G wireless, the internet of things, artificial intelligence, and augmented and virtual reality. With technical staff now dispersed and working remotely, organizations will face new challenges to onboard and implement the new technologies, tools and support structures needed to keep business moving. Here are three key ways the corporate landscape for tech and skills will change in the aftermath of COVID-19. 1. Tech will evolve even faster A portfolio of critical and interrelated new technologies are evolving at warp speed. Here are several: 2. Employees must work in new ways, and learn new skills How are your employees going to keep up, so you can accelerate your own embrace of these new tools? A central challenge for companies is that physical proximity matters, but now people are working dispersed. Ideation and knowledge-sharing happens informally as people stand around the water cooler-'What are you working on?' 'What is this new technology?' Now people must more actively seek out the insights and tips they got in person before the pandemic. Historically companies worked in a simple manner - all employees reported to an office or any other workplace and did most of the work. Employees had the complete context around the work. Over the last decade, we saw the rise of the gig economy where you could carve out some work and flip it over to an unknown person in the crowd with no context. What may emerge now is a mix of both -employees who work as in a crowd much of the time. They will visit the workplace sometimes, and work from anywhere the rest of the time. But this requires significant changes both for the employer and the employee. Employees need to be more flexibly aligned. In many companies, employees develop deep roots with the teams or department they belong to. This does have advantages in a traditional office set up, but not so much when they are working remotely and connected digitally. In a digital world, you can be two places at the same time: working on an assignment for the New York team this week and then working for the Boston team next week. When you look at this mode at a company-wide level, at the level of productivity for the company and opportunities for an employee, both are significantly higher. However, this is both a process change and a cultural change where you do not have a dedicated supervisor of employees. Automation becomes key. The above scenario can become chaotic if there are not strong systems for discovering, assigning and mentoring work across the workforce at a more granular level than what exists today. Work assignments and monitoring within a project on a daily or weekly basis is largely manual in most companies currently, and at best involves time sheets and weekly reports. It is necessary to bring in not only more data and dashboards but also more analytics and intelligence to manage it all effectively. Bonding matters. What really leads teams to work effectively together? At Wipro, we learned an important lesson not long ago. A dozen engineers were working on a big project for a client. But the client was unhappy, there was churn on the team, and we weren't meeting all our SLAs. We tried all kinds of fixes, but they didn't work. So we completely changed out the team. After a guarter or two, the client became very happy. It turned out the younger team had all gone to the same college. If anybody

had a problem, several of the others gave moral or technical support. It was really a team, not a bunch of individuals. We realized anew how important it can be for people to be emotionally connected to each other. This is one example showing people need to come to the workplace occasionally - one or two days weekly or fortnightly, with the focus on team meetings and We need new tools to support the new ways of working interactions. 3. People need to think and behave and learn differently, but we also need to offer them new tools to collaborate better virtually. We need software and infrastructures to help echo the serendipity and spontaneity of the workplace. Collaborative technologies: Networks, tools, and platforms to enable collaboration are still today mostly elementary. Happily, I'm sure they will evolve. Slack is a good example. It gives us excellent chat-like communication in the workplace. But today it's still mostly non-visual. We need tools that engage all our senses, even when we're working remotely. The informality of Slack was initially highly attractive, compared to the formality of email. But the sessions we schedule with today's video tools like Zoom or Webex or Teams still feel like very formal meetings. We set them up in our calendars. They are not a replica for water cooler talks or going out for drinks after work. We may need some kind of hybrid software platform to bring GitHub-like collaboration to every workplace, combined with Zoomlike video conferencing, but all of it effortlessly integrated into our workspaces. Better connectivity: Everybody is going to need better wireless and wired networks. We'll need it for collaboration, for training, and for just about everything we do. We need more bandwidth, lower latency, greater reliability, and the ability to slice the network into different signals based on various kinds of priorities. A surgery needs preference over a group chat, for example. Voila! That is what 5G offers! We just need it to happen faster. \*\*\* This lockdown will not continue indefinitely. We certainly hope the worst of the COVID-19 virus will pass in the next few months. But this won't be the last crisis. In the future it may be another virus, the political fallout from this one, or a whole different sort of business continuity and workplace challenge. Every organization has the responsibility to change so if a situation like this one repeats itself, it doesn't find itself in disarray. We all have to redesign our processes to presume disruption in the future. It is understandable that so many organizations didn't know how to respond to COVID-19. But next time, if you cannot respond, it will be unpardonable. K. R. Sanjiv Chief Technology Office K. R. Sanjiv is the Chief Technology Officer for Wipro's Global IT Business. The CTO office is responsible for establishing the company's technical vision and strategy and also leading various aspects of the company's future technology development. It includes incubation of the emerging technologies, creating an eco-system for the innovations in these spaces, IP management and creating industry and academic alliances. Prior to this role, he was Global Head of Analytics & Information Management business unit. He carried P&L responsibility, strategy and operations of this unit globally reporting to CEO. The Analytics & Information Management helped customers derive valuable insights out of integrated information by bringing together the combined expertise of Advanced Analytics, Business Intelligence, Performance Management and Information Management. Sanjiv has over 25 years of enterprise IT experience, including consulting, application and technology development spanning multiple industry segments and diverse technology areas. Since joining Wipro in 1989, Sanjiv has been involved in defining enterprise

### **Open-Source Inventiveness**

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/sixreasons-open-source-is-the-tool-for-now/ ----- About the Author Contact Wipro Please fill the required details to access the content Six Reasons Open Source Is the Tool for Now June | 2020 Previously published at Techonomy Open source is transforming how enterprise software is developed and consumed. The collaborative approach to developing applications has been around a long time, but has matured enormously in recent years, and is now being embraced more and more widely. When companies accept the power of community and let go a little control, they learn that open source broadens the range of ideas and talent that can contribute to any given corporate software project, with often stunningly effective results. In this COVID-19 era, as every company aims to become more resilient and capable of continuing under adverse circumstances, there are more reasons than ever to embrace open source technologies and methods. When so many companies are just trying to ensure their IT runs, many transformational initiatives have been cancelled or put on hold. Many IT executives tell me they want to do more than just make sure their companies operate, they want to use the pandemic as a catalyst for much needed change. With open source, you can do that: Create a leaner, more innovative and responsive entity by embracing open source for its well-known ability to reduce the price of development. However, open source in no way reduces a company's ability to innovate rapidly to address new challenges and opportunities. Open source is a tool for now. Here's why. 1: Open Source retains talent. The best people want to work with the latest and greatest technologies and in a collaborative manner and that's open source, so taking this approach can help companies address one of the most widespread corporate challenges attracting and retaining top software engineers. A huge global community of developers is already committed to the open source movement, and it's growing at a torrid pace. GitHub, the central repository of open source code and an essential resource for programmers, serves more than 40 million technologists, 10 million more than last year, with 80% of the contributors coming from outside North America. Microsoft, once militantly opposed, recognized the transformation of open source to its customers when it spent \$7.5 billion to buy GitHub in 2018. Using open source helps companies find and keep great engineers because the most talented programmers believe in the open source world and enjoy working on open source projects. Among Wipro's clients that have embraced open source, 70% of IT executives say a

major reason they've done so is to attract and retain technical talent. 2: Enterprises can take the process further with "inner source." It's clear you can source and create superb software if you tap into the vast library of preexisting software components as well as the huge enthusiastic community of open source developers. At Wipro, we're excited about the closely-related phenomenon we call "inner source." That means software developed inside a company using open source development techniques. Companies that "inner source" create internal networks of shared code, and develop a culture of collaboration and collective code ownership. This kind of environment makes many engineers very happy, helps reduce support costs, improves code quality and security, and drives more innovation. Our clients say they like to take open source components and customize them to their own needs. We call this secondary innovation, or taking existing open source innovation and adding your own features and functionality. You cannot do this with proprietary code. As IT departments consume and modify more open source in a more transparent and collaborative manner, they begin to think of things they'd never thought of before. Innovation is accelerated. A "fail fast" culture emerges—if it doesn't work right away, move on; it's no big deal. Other benefits of inner source are technology standardization and reduction in support costs; improved security due to more rapidly identified and remediated issues. Studies show that developers who use open source code are 30% to 70% more productive than those who mostly work with code developed inside a company. 3: Open source increases productivity and speeds up progress. One of Wipro's clients speaks about 'day one productivity' when it hires open source programmers. Those engineers can be productive almost from day one because they come with key skills already in place. They learned open source coding before they arrived. That's a stark contrast to the typical situation, when a big company relies more on packaged software it has customized to its own needs. In such environments, developers can take from three to six months to become truly productive. Many companies are recognizing the value of open source. Eight of the world's largest financial institutions recently formed the Fintech Open Source Foundation (FinOS) to "accelerate collaboration and innovation in financial services." The members realized that by creating common shared libraries of code, they could do much more together than alone. Wipro has been involved in the effort from its early stages. Separately, Capital One, a company Wipro has worked with for more than a decade, calls itself "an open source first organization." Their Hygieia open source project (named after the Greek goddess of health and hygiene) offers a single dashboard to track the "health" of its entire internal software delivery pipeline. But Capital One extended its open approach so other companies could participate, and now a powerful group of major companies—American Airlines, Ford, T-Mobile, and Verizon to name a few—have joined the project. Wipro is the only global systems integrator participating in this ecosystem. 4: Customization is easier. Some big companies resist open source because they worry about security, IP, and license issues. They believe they can always produce better software on their own. Wipro encountered one company whose IT leadership insisted that no one could create something tailored for financial services firms as well as they could. However, after spending just two hours with the company's development team, we discovered that for 11 of the 15 applications they wanted to open source, better alternatives already existed on GitHub. Another company proudly

informed us that it had no open source software in the application it used to test other applications for security issues. When we looked, however, we found more than 170 open source components. Open source has deeply penetrated the enterprise, and not in small numbers; typically to the tune of thousands of components. The good thing is there are many methods, processes, and tools to help automate the governance and compliance process. 5: It really is cheaper. Because of the shared efforts of a global community of programmers and supporting commercial interests that have been working for years, there are many mature "enterprise-worthy" open source technologies available at significantly reduced cost compared to proprietary alternatives. Committing to open source allows a company to extract costs from the development process, yet still invest in things that are important, notably innovation-related efforts. Maybe you want to put more of your customer-facing applications on the public cloud or want to modernize your internal applications or infrastructure. Open source allows you to do this and still positively influence the balance sheet. 6: Open Source increases organizational flexibility in times of crisis. When everything inside and outside of companies is topsy-turvy, open source provides many advantages. These days, you hear a lot about working from home. Distributed working—people contributing whenever they can from wherever they are—is the foundation of the open source community! If your company was already using open source when the coronavirus crisis erupted, your engineering teams were able to be more flexible in how they responded. The most resilient organizations are the ones most attuned to open source culture. In a recent study by GitHub regarding developer productivity and COVID-19, some of the more interesting findings are: "...issues in enterprise repositories rise and fall around COVID-19 outbreaks and shelterin-place orders." This is highly likely because of the forced move to a more distributed development model. · "... open source projects have seen a spike in activity." Clearly, developers are collaborating more. There are both immediate and potentially far reaching implications of the collection of changes GitHub has observed. Chiefly among them is the fact that enterprises should support the move to a more collaborative and distributed development model to address the challenges imposed by the pandemic; clearly, their developers are figuring out how to make it work. And, although humans are social beings, and need face-to-face interactions to thrive, clearly the brick and mortar developer model is not absolutely required to produce high quality software. Yes, open source still remains a less expensive way to acquire enterprise-caliber software, but its ability to facilitate innovation, improve code quality, remediate security issues, and keep developers happy, are its true benefits. You may come for the money, but you'll stay for everything else! Andrew Aitken Andrew Aitken is the GM & Global Open Source Practice leader for Wipro Technologies. In this capacity he and his team are responsible for crafting and executing Wipro's open source consulting, go-to-market and solutions strategy. Additionally, Andrew consults with selected Wipro clients on their open source strategies. Mr. Aitken has served as an open source advisor to the White House and California Senate and as a guest lecturer at Stanford's Entrepreneur program. He has been an investor, Board member and Advisor to multiple open source companies. He is currently on the Board of Linux Foundation Networking Project, the partner Advisory Board of Acquia and the Governance committee for FinOS. He is a past Board

### Taking crisis by the horns

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/taking-crisis-by-the-horns/ ----- About the Author Contact Wipro Please fill the required details to access the content Taking crisis by the horns July | 2020 Even before the WHO declared COVID-19 as a pandemic, Wipro's CIO team had started readying our business continuity plans (BCP). We were prepared for a staggered lockdown and movement of people and assets into their homes. However, what came next was an urgent call for nationwide lockdowns and before anyone could fathom it, the world went came to a standstill. This is an unprecedented crisis, and no BCP was prepared for this. After all, there is no rulebook when the world stands still! What followed was an amazing show of resilience and collaboration that kept the show running - truly a moment of pride amidst the disruption COVID-19 brought with it. The CIO organization: Weathering the storm

A global lockdown required us to enable work from home for 100% of our workforce - something that was unheard of previously. In addition, a large number of employees used desktops and could not carry them home. How do we ensure that everyone has the infrastructure they need to stay productive? How do we ensure secure connectivity to our networks and those of our customers? How do we manage challenges of working from home like power outages or network disruptions? On March 15, evaluating the disruption across the globe, we took action. We planned to procure laptops, but the sudden spike in their demand left us to prepare for moving desktops with security controls to our employees' homes. Exactly a week later, there was a nationwide lockdown announced with hardly a few hours' notice. We had to quickly change our plans and move machines to employees' homes overnight. Roughly 30,000 machines were moved within few days. Eliminated the JD for fastest market response: This was a time when job descriptions could not restrict what you had to do. We created a taskforce in record time to identify the immediate first step and meticulously plan for the way forward. To enable quick collaboration across multiple locations, we built a 10-point checklist around system, access, and security compliance before employees began working from home. While the team was grappling with the challenges, additional requests for machines were

pouring in and we had to arrange for an additional 10,000 systems. People had left for their hometowns in the wake of uncertainty and overnight, we had to figure how many people were available in various regions for setting up. Working in overdrive, we arranged passes, travel arrangements, security measures, and even food and dorms. Desperate times do call for desperate measures. In the absence of support staff, the IT team was suddenly doing everything, each one of us were an - IT helpdesk, IT engineer, delivery person, and daily reporters of news. Ensured access to necessary infrastructure for remote work: We moved desktops to employees' homes and procured hardware like data cards almost overnight. Our support team members stepped up admirably to work amidst the constraints of local permissions, inter-state restrictions, etc. We leveraged our VDI solution and LMI remote assistance so employees with laptops could work uninterrupted. Planned for new ways of working with ironclad security: Now that these machines were moved without those required security controls, we had to bring up a virtual pit stop SWAT team who worked on DIY automated scripts and supporting the Business team to make these systems compliant so they could connect securely to VPN and VDI infra with Telecommute. Work-fromhome doesn't allow for the same continuity that an office environment does, with challenges of power outages and connectivity abound. We worked around these challenges with innovative solutions such as shifts structured around outage schedules etc. This ensured that Wipro is up and running for our customers at all times. We also ensured that all requisite client permissions for remote access are in place. A set of prerequisites including six basic security checks were implemented before posturing was enabled. We used a sophisticated system cloning mechanism to ensure a large number of systems could run a security update at the same time, saving resources and time to access. Improvised on existing technology for constant support: Employees working remotely needed more support and there was a surge in ticket volumes for IT setup. Wipro's IT Service Desk led by ITIL Methodology and driven by our ServiceNXT framework enabled selfhelp. This allows users to control resolution across levels and channels chat, web and calls. We improvised our DIY framework to control the surge in tickets and later deployed a one-click install solution that automated most of these clicks. This was not easy at all, given a nation-wide lockdown with inter-state borders closed. Our stories of grit involved being chased by stray dogs, falling asleep on chairs overnight, and tiresome travel to ensure crossborder support. But we were able to achieve our goal - our systems are up and running, our customer support has not been compromised, appreciation from our customers has been pouring in non-stop, and we were also able to launch new programs for our customers in this unprecedented time. I think our team did such a great job and I applaud them for this tremendous show of grit. Planning for the next phase - Reopening: While the ingenious use of technology by the CIO team in times of disruption became the key enabler for business continuity for us and our clients, there is still one more challenge to overcome. Getting part of the workforce back to work would require meticulous planning once the lockdown is lifted. We have already opened up two offices - bringing employees back with reconciliation, sanitization, and vehicles that had to be sanitized - and are working to get others operational too. Evolving and ready to meet the demands of the future With remote working stabilized in these past few weeks, the world is truly moving to a new normal that is here to stay. Organizations will move to

more digital ways of working. Employees will be comfortable with working from home. Usage of remote technologies like collaboration tools, VDI etc. Service, sales, meetings, conferences, and collaboration to execute the next big idea faster will increasingly get digital, leveraging 5G and new-age collaboration tools. This is a future the world is moving toward, and we are geared up to help organizations to keep their business up and running. Industry: Rohit Adlakha Chief Digital & Information Officer and Global Head, Wipro HOLMES™ Rohit is at the helm of Wipro's digital transformation journey where his core focus lies in creating end-user delight, strengthening digital security and trust, monetizing IPs, and building a culture that fosters innovation. As a technology leader, he provides direction in aligning technology with business strategies, reimagining customer success, weaving data and information into power, turning Wipro into a digital showcase for customers, and leveraging technology to create value for the business. Rohit is a Wipro veteran, having spent 25 years in several key roles across the world in sales, delivery, and P&L management. In the last two decades, he has incubated and scaled several businesses from infancy. ===============

#### The race to keep pace

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/the-raceto-keep-pace/---- Contact Wipro Please fill the required details to access the content The race to keep pace Why next-gen automobiles need the convergence of business models Why next-gen automobiles need the convergence of business models October | 2018 Just as connectivity is continuously fuelling mobility in our offices, schools and homes, it is also transforming businesses including the automobile industry in ways that radically flip what the word 'car' now means. No longer is an automobile just a product that transports you between two points, it also performs services as it takes you to your destination. Recent developments in self-driving, electrification, and mobility services are driving this trend. Cars are no longer dreary spaces to pass time in while awaiting the arrival of a destination, they can also be places of musical communion or personal refuge with recreational platforms equipped to provide highly personalized entertainment in transit. The prospect of making this 'product and service' business a viable reality will require a considered convergence of multiple business models. Original Equipment Manufacturers (OEMs) will not be able to function in isolation, instead they will increasingly seek to team up with clean energy producers, data analytics experts, software developers, personal entertainment providers and traffic safety regulators to co-create tomorrow's evolved next-gen automobiles. The disrupted automotive ecosystem It would be no exaggeration to say that these are challenging times for carmakers as they race to keep pace with a changing auto ecosystem that is seeing major upheavals. Let us consider a few of these. First, customers are no longer focused only on the product and its performance. Their expectations have in fact gone beyond manufacturing to enter the domain of services, electronics and software. Second, as a result, auto majors are finding it imperative to morph into tech companies by leveraging the unique business opportunities offered by disruptive

technologies. Take Artificial Intelligence (AI). Today, not only can AI provide customers with a full-fledged home entertainment experience in their cars but also procure time-critical information about an accident scene by leveraging insights from IoT. Third is the Electric Vehicle (EV) revolution that has all the leading automakers in the fray. Volkswagen and General Motors are gearing up to launch EVs by 2030, and many others, too, are in the assembly line. EVs are now being touted to take on the disruptive role of smartphones in the auto industry—a disruption that could phase out for good the only kind of fuel-powered vehicles we have ever known. Fourth, and arguably the most game-changing trend in recent times in this industry, is the exponential growth of the personal mobility market. Already, it's tough to imagine a world before 'mobility on demand' became the buzzword and Lyft and Uber became a way of life. This radical business model that promises to replace car ownership and impact urban planning is bound to grow in the coming years. But more than anything else, what is clear is that, as these technology-driven changes gain momentum, they will transform how OEMs do business. Those that snooze lose: Automobile companies must pivot The need to stay relevant has led major automakers to heavily invest in futuristic technologies that combine software and physical devices. Ford's \$1 billion investment in Argo AI, a tech start-up, is a prime example of the effect technology is having on the automotive industry. More of such partnerships are emerging in the sector as they add immense value for consumers. It is most important for all players in the industry to understand how to step up to changed times. For OEMs in particular, the key to survival will lie in strategy. They will need to be proactive in anticipating market trends and changing consumer preferences, and be open to tweaking their business approach accordingly. Also, the growing realization that they cannot do it all on their own will push them gradually to team up with tech companies. For instance, Toyota is collaborating with Amazon and Pizza Hut for its self-driven vehicles. And Lyft is partnering with GM and Jaguar Land Rover. Then there are the value-additions OEMs can bring into the new ecosystem, for instance, in the way that Google has: it has teamed up with Walmart to enable shoppers at the retail giant get a shuttle ride with Google's self-driving car, Waymo. But most of all, what is clear is that as unprecedented connectivity continually transforms the automobile industry, car manufacturers and digital service providers of alhues will have to learn to create new business models. Both will need to invent new ways of doing business that leverages the expertise of each while delivering an outcome 

### Wipro's commitment to communities

#### and the environment

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communities and the environment November | 2018 This week, I accepted a challenge from Patrick Decker of Xylem to discuss Wipro's commitment to communities and the environment. This is part of the Business Roundtable's Sustainability Challenge #EmbracingSustainability. We all know Wipro as a leading global information technology company that works on cutting-edge and emerging technologies that help our clients adapt to the digital world. However, we are also a company that believes that corporations are an integral part of society that must give back to the communities they operate in. Why? Very simply - because we believe "it's the right thing to do." As part of the challenge, I decided to focus on Wipro's work in the US, and specifically our commitment to building stronger communities through improving public school education. I highlighted two of the great programs we are supporting - Wipro Science Education Fellowship and our partnership with First Book: We believe that teachers are one of the key backbones to a strong and vibrant society. Through the Wipro Science Education Fellowship (or Wipro SEF) we are funding professional development fellowships for K-12 public school teachers in urban and rural school districts. The goal is to make our public school teachers stronger STEM educators and enable them to make sustainable change for students in their communities. This rigorous and selective fellowship is a two-year, 225-hour commitment that will enable participating teachers to not only become stronger teachers and leaders in the classroom, but in their school districts as well. Today, Wipro SEF has more than 400 teachers in the program, covering 35 school districts, each supported by a local university, impacting tens of thousands of students. In many communities, books and educational resources are scarce. Inadequate resources will inevitably lead to poor educational outcomes. To empower students and help them overcome some of these obstacles, Wipro has committed to injecting new books and educational supplies into the communities in which we operate. Since 2015, in collaboration with our nonprofit partner, First Book, Wipro has donated more than 215,000 books to at-risk children in the US and Canada, impacting over 100,000 students. In addition, hundreds of my colleagues at Wipro have fundraised, and started reading and science clubs, with the intent of providing support and encouragement to children who desperately need it. Globally, Wipro's commitment to the environment is substantial and enduring. We began implementing ecological sustainability initiatives in 2006, focused on four broad areas: And our environmental sustainability efforts have yielded outstanding results: I'm humbled to share that these efforts have not gone unnoticed. Wipro was recognized as a member of the Dow Jones Sustainability Index for the 9th year in a row and named one of the World's Most Ethical Companies by the Ethisphere Institute for an 8th successive year. For decades, we have remained focused on giving back to communities through values which are defined through "The Spirit of Wipro" - four principles that represent who we are and who we want to be. They are the touchstone for all that we do in the US and throughout the world. These values are so important to us that we articulate them on the back of our business cards. As we approach 2019, there is no slowing us down. We remain committed to high ethical standards and promoting support for communities and the environment through every action. To learn more about this work and the Spirit of Wipro values, please watch the video below or visit https://www.wipro.com/sustainability/.

#### Improve, change, or displace?

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/improvechange-or-displace/ ---- Contact Wipro Related Blogs Are Australian firms making a mistake with RPA? Part 3 of Deep Learning - Building the Next Generation of Edge Devices Agile and Enterprise Architecture: A Strategic Alliance Please fill the required details to access the content Improve, change, or displace? Innovation management as the new competitive advantage January | 2019 Most businesses are at the cusp of a digital transformation that will lead to a complete remaking of their operations. This process is likely to be even more transformative than that of the previous rounds of industrialization. I believe, digitalization is a kind of continuous revolution, not a once-and-done event. Companies not only need to think about incorporating the latest technology into their business but reengineer their entire process of innovation. In earlier times, winners tended to be those who mastered a given technology, tool or process. Tomorrow's winners will be those who understand innovation and have integrated the ability to change into their culture and processes. In other words, innovation is becoming a new core competency. Understanding innovation How do you develop this capability? First, you need to understand the nature of your goal. Innovation is often divided into three major categories: incremental, disruptive, or radical. Incremental innovation is the lowest-risk variety, those minor upgrades that add up over time to substantial gains, the research equivalent of the regular dividend. Disruptive innovation involves introducing a new offering that re-imagines traditional sources of value in a market; a new business model with which traditional competitors are unable to compete. Such innovation focuses on re-imagining traditional sources of value in a market. Think of the way Netflix or Airbnb, for instance, has re-imagined the entertainment or lodging business. For an existing industry, disruptive innovation is something that happens to market participants, a cataclysmic new source of competition shows up, that over time leads to the remaking of an entire industry. Radical innovation, on the other hand, begins with the invention and then works backward toward the market. Consider, for example, the flying driverless electric aircraft that Lilium and a number of other startups are now building that may transform existing value chains, make some irrelevant and build new ones that don't exist. Smart phones rendered the entire GPS industry, and a large part of the amateur photography industry irrelevant and created new ones like digital banking and Realtime Asset Sharing, like Uber. Terms like disruptive innovation and radical innovation tend to be thrown around very loosely. However, as a research team from RWTH Aachen University warned in a recent Harvard Business Review article, it's important for firms to maintain a clear understanding of - and strategy for - disruptive and radical innovation, because each demands a different kind of managerial response. Their review of over 1000 research articles on innovation published over the past 40 years suggests that faced with the threat of disruptive innovation, a

company's best bet is to respond with a new business unit or a new business model that can face that threat head-on. On the other hand, radical innovation means you need the capacity to incorporate a big new idea very quickly, often by hiring imaginative employees to form an 'anti-company' of sorts within the firm. It's an insightful analysis, but one that stops short of recognizing just how much innovation is changing the nature of competition. Today, the possibilities with Big Data, artificial intelligence, and cloud computing mean that very few sources of competitive advantage can last for any appreciable length of time. The boundaries of the organization itself are now far less fixed than they once were, as global broadband, mobile communication networks, and computational power on tap makes it ever easier to collaborate with customers and suppliers. The new paradigm For most of the 20th century and even into the 2000s, businesses talked about competitive advantage in terms that were vaguely military and even slightly medieval -- lots of walls, moats, and even the occasional catapult. That may not be over now, but it's definitely on its way out. Increasingly, the ability to select the kinds of innovation projects to pursue and incorporate their power quickly is becoming not just a way to create a competitive advantage but may be the only sustainable competitive advantage. As business leaders, we not only need innovation, we need an innovation strategy and process. In much the same way that we have always had a financial strategy and an M&A strategy, we now need to consider our innovation portfolio, keeping a close eye on developments across industries, technological advancements that could be applied to our industry, and research that could yield transformative gains for our businesses. For some companies, this will mean focusing the bulk of their efforts on incremental advances. Others will need to make bigger bets, much as a portfolio investor might keep most of his assets in blue chip stocks but keep significant holdings on more speculative opportunities. The digital era demands institutionalizing a new way of strategic thinking and operating that requires creative, improvisational thinking, one that is always willing to reimagine the nature of the firm's value proposition and the value chain that delivers it, and is always open to new partners, new markets, and new product possibilities. In 2018, Gartner reported that Australia's Robotic Process Automation (RPA) industry had registered ~2x growth over the previous year, seeing a 48 per cent rise in total revenues. Part 3: What Are the Architectural Aspects of Edge Devices Needed for Deep Learning? The 3 pillars of Enterprise Architecture are Alignment, Insight and Quality. ===============

# What Australian firms Need from their Strategic

#### Partners - An insight

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/whataustralian-firms-need-from-their-strategic-partners-an-insight/ ----- Contact Wipro Please fill the required details to access the content What Australian firms Need from their Strategic Partners - An insight September | 2019 In 2012, a simplified graphic design tool was launched in Australia. This Software-as-a-Service (SaaS) product - Canva - went global at an unprecedented pace and acquired 10 million users in just five years. Just a decade ago, growth at this scale was stuff of corporate dreams. Today, it's a reality. Which business doesn't want to be a Canva? Now that Unicorn stories are flourishing, the C-suite is taking note and changing strategies to win in this new world of possibilities. In this article, we discuss: The shifting priorities of Australian businesses and the expectations they have from their strategic partners to help them win in this changing business landscape. Shift in focus: Businesses are evolving and embracing digital technologies to innovate and collaborate, and want to scale faster and deliver a seamless customer experience through hyper-connected systems and processes. They want to listen to their customers, understand them, simplify processes and make smarter decisions through predictive analytics, Artificial Intelligence (AI), and Machine Learning (ML). With GDPR, IFRS and other laws to safeguard consumer interests and data, organizations are increasingly looking to build customer trust by ensuring sensitive data is protected and are safeguarding themselves and their customers from data breaches and cyber attacks. Through all this, they want to build trust, stay relevant, competitive, and profitable. The story is no different in Australia. With rapid growth over the last few years, we have witnessed the evolution of Australian businesses and their strategic needs. A thriving advisor and analyst community, an open marketplace, and specific CXO forums mean that customers in Australia are more informed, educated, and aware than ever. According to Gartner[1], having quality information available digitally has made it much easier for buyers to gather information independently. This means that IT and Consultancy firms have fewer opportunities to influence buying decisions. Studies prove that B2B buyers who are considering a purchase, spend only 17 per cent of their time meeting with potential suppliers. This means that, if they are comparing multiple suppliers, they will only spend 5 to 6 per cent of this time with any one sales representative. Customers who received information that helped ease their buying decisions from suppliers were 2.8 times more likely to experience a high degree of purchase ease, and three times more likely to buy a bigger deal with less regret. Essentially customer stickiness to a vendor or provider is becoming difficult. Customers are looking for strategic partners who can help them move faster on their digital transformation journey. Expectations from strategic partnerships 1. Faster return on investment Budgets are a challenge for Australian Chief Executive Officers (CIOs) and Chief Operating Officers(COOs) alike, hindering their transformation to digital business. A Gartner survey[2] showed that IT budgets grew by 1.5 per cent in ANZ in 2019, as compared to 2.9 per cent globally this year. The flat IT budgets mean that Australian CIOs are increasingly cost conscious. They are increasingly looking at Return on Investment (ROI) benefits in the 1st year of an IT partnership. In fact, re-bids are becoming more common in the first two years of signing a contract, pushing the onus on IT partners to showcase productivity and tangible outcomes. 2. Outcome driven contracts As Australian businesses look for committed productivity and outcome-based contracts at the outset, they are diving deep in to partner skills and capabilities. Can the partner support the needs of an increasingly digital and hybrid (human + bot) workforce and deliver the desired experience? Does

the partner have the right skills and abilities to deliver on digital business needs? What kind of investments have they made in digital innovation? How will they be able to help enable analytics and AI so that humans can take up higher skilled activities? What is their skin in the game? These are questions Australian CIOs and COOs are asking before signing on the dotted line. 3. Risk mitigation In addition to cost savings, risk mitigation and finding 'safe hands' are top priorities when selecting a new partner. The volatile nature of the markets and the fast pace of change, make flexibility, agility, and dependability valuable traits in an IT or BPO partner. Transformation and change are the new normal and Australian businesses are looking for partners who can keep up. In an ever-connected world, disruption can be an opportunity to innovate and do things better. At the same time, the connected fabric of people, processes and technology leaves vulnerabilities that can be exploited by mal-intentioned entities. A strong risk mitigation mindset, a holistic approach to cyber security, and the ability to prevent cyber attacks are key requirements from a technology partner. 4. Cultural fitment Companies are looking for more than just a capable and cost effective partner or service provider. High on their radar is finding a partner who is a good cultural fit. Recent YouGov Omnibus research found that 87 per cent of Australians believe that businesses have a responsibility to do social good[3]. Sustainability and Corporate Social Responsibility (CSR) initiatives have become more important than they ever were and Australian businesses are looking for partners who share their values and are giving back to society. Australian businesses, like their global counterparts, are looking to adapt to a digital marketplace and take advantage of the new possibilities offered by emerging technologies. As they race to take the right decisions on Cyber Security, Cloud strategy, Analytics, AI, and Intelligent Automation, they do face challenges that are unique to their region. Australian businesses need their partners to build trust, understand them and help them overcome their unique challenges and partner with them in their business case creation from the inception. Tighter budgets, an emphasis on ROI, and an increased focus on productivity mean that Australian businesses are looking for partners who can deliver innovation with efficiency and keep it simple. Having a partner who is dependable and a good cultural fit is seen as smart business in an era of market uncertainties and increased public scrutiny. There are exciting times ahead in the Australian business landscape and I am looking forward to it. Connect with me at karan.kanchan@wipro.com to know more about emerging trends. Reference [1]https://www.gartner.com/en/sales-service/insights/b2b-buyingjourney [2]https://www.gartner.com/en/newsroom/press-releases/ 2019-05-15-gartner-survey-shows-cios-in-australia-and-new-zealan [3]https:// au.yougov.com/news/2018/01/04/businesses-and-environmental-damage/

# 4 ways in which Artificial Intelligence would assist enterprises of tomorrow

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/4-waysin-which-artificial-intelligence-would-assist-enterprises/---- Contact Wipro Please fill the required details to access the content 4 ways in which Artificial Intelligence would assist enterprises of tomorrow March | 2015 Last year an Artificial Intelligence (AI) system finally cleared the Turing test - a test where humans interacts with a machine and is unable to differentiate if they are actually interacting with a machine or a fellow human being. AI has become one of the most talked about buzzword right now. In this blog, I would be sharing my views as to how AI is going to shape enterprises of tomorrow in the near future. I see four major pillars where AI would have a significant impact: User Experience Google and Baidu have developed complex AI systems that can distinguish several objects from a webpage. Very soon a new breed of smart assistants would rise who will define new capabilities for voice-based assistants. These assistants would be having a persona of their own and would be present for their users all the while. Delivery of services using these smart agents would be much more humanlike and we would be seeing virtual agents move towards the agents like "Samantha" from the movie 'HER' as an end goal. We are already witnessing some serious feats by these agents where they are now predicting the outcome of competitive sports, all this being made possible with the development of technologies like NLP and ontologies. Robotic Process Automation (RPA) With the advances in AI, algorithms have become adept in extracting meaning out of unstructured data and ingesting the data. Certain specific business processes which are repetitive and have a definite pattern of behavior will certainly be automated. A good example is routing of service tickets in an enterprise. You actually don't need a human agent to sit and route it and with the number of categories that are present, it becomes almost impossible to get the routing of tickets right in the first shot. While it is difficult for a human, this repetitive process can be easily automated by a service bot which can enable great accuracy and enable productivity gains. But RPA will not just impact enterprise hierarchy at the lower level. I feel that this is just a beginning and RPA will have much more larger impact even on higher end white collar jobs where, the ROI from RPA will be obviously much higher in this case. Let's take the scenario of a data analyst who builds models for predictive analytics. Considering the nature of his/her work, it is possible for the machines to develop the intelligence required to create the most optimal models, thereby doing a part of the work that a data analyst performs. Internet of Things (IoT) IOT market without any doubt is going to become a huge opportunity. With every passing year we are only seeing the numbers going higher up in terms of revenue opportunity. But enterprises would be able to only encash on this opportunity if they have a

grip over the data and are able to generate meaningful insights out of the huge amount of data that these devices produce. While a lot of academicians suggests that analytics would play a key role in this, but I would say that the analytics powered by AI engines would be the key driver here. Knowledge Virtualization Enterprises are also enabling a new set of machines and bots that can enable knowledge virtualization, leading to huge opportunities in assisting users across domains. Machines will be able to ingest information from different sources. AI systems will be able to assist research scholars and help them enhance the output of their papers. Imagine a scenario where a capable AI system ingests all of the knowledge from research papers, it would become so much easier for research scholars to rely on these bots for citations. Law firms would also be a huge beneficiary of this form of AI engines wherein they would be assisted by these bots who will be much more efficient and relentless in pursuing the job assigned. And the result in this situation - the role of an associate might be eventually done away with in law firms. We are living in a promising era and I feel that AI systems are going to redefine the way enterprises conduct their business. What are your thoughts on this? Are these the key pillars that will define the trajectory of AI? Please leave your comments in the section below.

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# Analytics - More important by the day

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/ analytics-more-important-by-the-day/ ----- Contact Wipro Please fill the required details to access the content Analytics - More important by the day March | 2012 Although outsourcing providers have been offering analytics services for the last 15 years, it is only now that we are seeing a renewed and sustained interest in analytics. The scope of buyers has also increased with interest for analytics now coming from across functions like procurement, marketing and finance, apart from the traditional 'quants' and certain specialized functions. Why now? The changing economic environment is certainly a big factor, as it is changing the way corporations conduct business. Today, Another reason is that the amount of data available is exploding, and analytics is one of the best tools to make sense of this Big Data. Stephen Morris, senior business architect, business architecture + transformation UK for Wipro, says that companies recognize they have to leverage the data flow to build competitive strategies. But with Big Data becoming so enormous, many enterprises do not possess the requisite tools to make the best use of the knowledge buried inside. Analytics is "a fastemerging solution to this challenge. But it's not just about unraveling historical trends. It provides a compelling tool to predict," he explains. Read more about the growing importance of Analytics in the article, "Why Analytics Is So Important Today and the Eleven Trends Impacting It". The article provides greater details on the following eleven trends that are impacting Analytics, Big Data and Business Intelligence: What do you think?

# The key to anticipating customer needs

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/the-keyto-anticipating-customer-needs/ ----- Contact Wipro Please fill the required details to access the content The key to anticipating customer needs July | 2012 An enterprise must consistently aim to meet the expectations of its customers. Actionable understanding of customer expectations can be enabled by data. Customer profiles, preferences, behavior and sentiment analysis, when accurately contextualized, facilitate an understanding of what an enterprise should perform as the Next Best Action. The conventional route to creating marketing strategy is to hand over data to statisticians to chew, turn inside out, filter and run through various models until we have actionable insights. In most situations, these 'actionable insights' can be quite exasperating. By the time a business turns "actionable insights" into a tactical response, the customer and market conditions have changed. Such a marketing strategy that has inherent lag, has limitations with respect to ROI as well. With effective use of data customers can turn into loyal fans. For example, when a mobile customer has a persistent call drop problem, can the service provider deliver customer-related data to the right department within the enterprise for swift corrective action, before customer dissatisfaction gets manifested? If the customer's call data records are analyzed and mapped (against the value of the customer), the provider may be able to immediately send an appropriate free talk time offer to the customer. In this case if the customer makes calls to his or her hometown frequently, the offer could be an appropriate free talk time plan for his or her hometown. Such customer centricity can turn users into loyal customers. Again, remember that the make-good offer was not drawn from a generic promotion or a pre-determined set of options. Rather, it was instantly customized for the specific customer's needs at that point in time. Consider another example - assume that a customer places an online order for an iPad. The store can look up the customer profile, identify him as a traveling salesman and define the Next Best Action for the store - say, making a discounted offer on device accessories that enhance battery life. There is a strong chance that the customer will buy these accessories, as this ties into his needs. Enterprises are taking advantage of emerging technologies to create differentiators and bottom line impact. Next Best Action initiatives are in their infancy. This presents a challenge, as roadmaps, tools and techniques are not well-defined. The ideal way to approach technologies that are evolving rapidly is to look for an end-to-end implementation partner who has domain specific expertise as well as proven technological capability. By helping create an intelligent implementation strategy for Next Best Action, the partner can put your business ahead of the curve, providing an immense competitive advantage.

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# Mobilization of enterprises - challenges & opportunities

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/ mobilization-of-enterprises-challenges-opportunities/ ---- Contact Wipro Please fill the required details to access the content Mobilization of Enterprises - Challenges & Opportunities November | 2010 With the proliferation of mobile technology, there is an increasing convergence of computers and telecommunication devices along with numerous applications traditionally accessed through computers. This convergence is the primary driving force behind the e-Mobility trend. Mobile banking, entertainment, and marketing are increasingly shaping the business paradigm shift to e-Mobility among enterprises. As the "mobilization" of enterprises grows from simple independent applications to more complex processes, a host of new challenges emerge. Enterprises deliver mobility today in a highly dynamic and fragmented world, that is, there are multiple devices, phone numbers, mailboxes, and security procedures, along with device-dependent interfaces and disjointed communication applications (such as telephony, e-mail, IM, and conferencing). This fragmented nature leads to a myriad of complexities in functionality and raises questions about data security. Another area of concern is the highly distributed and varied back-end system that is pervasive in enterprises. There is a clear need for a heterogeneous multiprocessing architecture that can interact continuously with the environment while simultaneously enabling a smooth transfer and management of large amounts of data in a secure manner. A strong system integration that integrates wireless networks and linkages with the back end is also necessary to address the diverse needs of this market. 'Going mobile' sure is a right move to stay ahead of the race. At the same time, enterprises can reap the rewards of 'going-mobile' only if these teething 

### That Awesome Hyphen between Man

#### and Machine

---- Arcticle source ---- https://www.wipro.com/blogs/wipro-insights/that-awesome-hyphen-between-man-and-machine/ ---- Contact Wipro Please fill the required details to access the content That Awesome Hyphen between Man and Machine August | 2017 Originally published in LinkedIn Recently, Morgan Stanley began using bots to make better investment decisions. The investment bank will use algorithmic assistance to make its army of 16,000 financial advisers smarter by analyzing markets, portfolios, tax laws, cash flow, etc. and help drive better investment decisions[i]. What Morgan

Stanley realizes is that human advisers build relationships with clients over decades while algorithms and Artificial Intelligence (AI) help them understand what is happening in markets and the lives of their customers. Both types of capabilities - building relationships and managing information -- are required for successful business. In other words, the Man-Machine combination is an exciting one. To use a worn out but highly appropriate cliché, the sum of the two is more than its parts. Let me explain this a little differently. We live in 2017, in the throes of the Fourth Industrial Revolution, whose chief narrative seems to center on the obsolescence of jobs, rather than on an improvement in the quality of life. The First Industrial Revolution, driven by mechanization, brought about great change in manufacturing and agriculture. There was a remarkable improvement in the quality of life. The revolution also displaced jobs but it did not displace humans. People learnt new skills when old ones were not required. And once they did, we were ready for the next industrial revolution. And the next. Now, we are on the cusp of an exciting Everything-Smart Revolution: smart grids, smart homes, autonomous cars...the list is long. Technology is destroying old jobs and creating new ones - as it has always done for decades. Here is what is happening. Automation is increasing our productivity, especially around rules-based, repetitive tasks. This requires many of us to put in less effort, creating time and availability for tasks that require high levels of human cognition and judgment. But the most forceful area where transformation is taking place is where Man-Machine collaboration begins. Man-Machine collaboration is not a new idea. In 2005, the website Playchess.com hosted a "freestyle" chess tournament in which various combinations of humans and computers could compete against each other. After a number of games, researchers wanted to know who won the most number of games. Was it the computer program? Was it the grandmasters? It turns out it was neither. The maximum number of games was won when chess experts worked seamlessly with the computer program. This tells us about the power of Man-Machine collaboration. Smart organizations are using this simple truth to create wildly successful businesses. Uber, for example, is using it to make humans more powerful and offer a better customer experience. Imagine the impact of automation, Machine Learning and AI on the medical profession. Agreed, nothing can replace a doctor's training and intuitive understanding of a patient's condition. But the doctor can gain a lot from the assistance provided by technology. In an instant, years and even decades of data can be analyzed and presented to doctors for more accurate diagnosis and treatment regimes. Under normal circumstances, it would have taken doctors years of practice to gain the kind of insights technology can generate. That investment in experience (time) is not required anymore. The bottom line is that instead of worrying about job loss, we need to work on making the Man-Machine interface better. See that hyphen between Man and Machine? That hyphen is what creates the magic. That hyphen is where the worlds of man and machine are integrated. We must devise integration that is hyper-aware, self-organizing and adaptive. That's where we need to focus our attention on the awesome hyphen. [1] https://www.bloomberg.com/news/articles/ 2017-05-31/morgan-stanley-s-16-000-human-brokers-get-algorithmic-

#### The cobot revolution is coming

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/thecobot-revolution-is-coming/ ---- Contact Wipro Please fill the required details to access the content The cobot revolution is coming September | 2017 Originally published in LinkedIn Your next colleague could be an industrial robot. Robots have been around for some time now, especially in manufacturing. What will distinguish the new generation of robots across industries beyond and including manufacturing is their more-thanrudimentary intelligence. We'll begin to think of these smart creations of technology as co-bots. The robots we have seen in action so far have been largely in the auto industry, in refineries and mining operations, in the furniture and rubber/plastic industries as well as in military operations. These robots present the classic image of automation while performing tasks like welding, assembling, painting, cutting, sawing lumber, injectionmolding, grinding, polishing, disarming and detonating dangerous bombs and conducting reconnaissance. They are little more than advanced CNC machines that work on a fixed input to do a fixed job for a fixed output. Their only advantage is that they make it possible for us to accurately do repetitive tasks or those that could cause harm and injury to humans. To put it another way, these robots can't be deployed for tasks that have variability. And that is the problem science and technology is trying to address. Anything that presents variability requires human attention. This is because humans can processes millions of data points to arrive at decisions almost intuitively. Humans bank on knowledge, experience, intuition, and sheer gumption to drive the things they do. Machines too are building massive banks of data with processing capabilities using Machine Learning (ML), Internet of Things (IoT), and Artificial Intelligence (AI) to bridge the gap and handle variability. I think "intelligence" is the key word here. When machines step up their performance using "intelligence" to respond to changing environments, we will be ready to treat them as co-bots. Co-bots will become an 'and' proposition and not a 'or' proposition. It's won't be 'can this robot do what a worker cannot do?' Instead bots and humans will work as teams. A day will come when we will be proud of the bots we work with, comparing and showing off their capabilities just as we do with our smart phones, music systems and cars. Technologies such as ML, IoT and AI are becoming more precise, making it possible for bots to handle sophisticated processes. We are already witnessing their impact in areas such as trading, medicine and manufacturing. We've reached a point in finance markets where bots are trained by humans with strategy, trading rules and checksand-balances. These bots respond to market price movements and take independent trading decisions. You could be trading in cryptocurrencies while fast asleep using one of these handy co-bots - and many already are[i]. It is my belief that co-bots will drive a very grounded revolution over the next 3 years in areas of manufacturing, warehousing and the retail industry. Co-bots will make a huge impact as they help reduce rejections/returns, increase yield way beyond today's values and immeasurably improve safety. We need to prepare for this immediate future - by staying open to the idea of "inducting and educating" the new ranks of "co-workers" that are on their

#### Who is the real master?

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/who-isthe-real-master/ ---- Contact Wipro Please fill the required details to access the content Who is the real master? October | 2017 Originally published in LinkedIn If you are into castles and dragons, blood and betrayal and men fighting with swords, you are perhaps already addicted to George RR Martin's television series, Game of Thrones (GoT). I am intrigued by the series for an entirely different reason: Zack Thoutt, a software engineer, fed all 5,000-odd pages of the previous five GoT books to an artificial intelligence (AI) system called a recurrent neural network and out came the next few chapters of Martin's epic[i]. The language isn't great but the style is close to Martin's, say reports, and fans think the scenarios conjured by the AI are plausible. You can take a look at some of these chapters on GitHub and decide for yourself. But the question is: How long before machines can begin to write exactly like Martin, manipulating a cast of over 2,000 across complex plots? Or for that matter, how long before machines can begin to do everything that we ask of them? Many suggest that Singularity, the point at which the distinction between humans and machines will be erased, could be just around the corner, say by 2030 or 2050. This is because not only are compute capabilities expanding exponentially, but costs are coming down. What could take years and decades in a computer lab - say, the ability to translate a language with 80% accuracy - has become an inexpensive and everyday commercial possibility. Today's publicly accessible systems can translate languages with almost 90% accuracy. But, navigating the 90% threshold is still a good few decades away. Robots are getting smarter for sure. Lego makes millions of bricks every hour and packages them with absolute precision using robotics[ii]; robo-assisted surgery is helping make complex procedures safe and cheap[iii]; beautiful homes are being built (literally) overnight by a bunch of automated arms driven by CAD drawings[iv]. These industries - from manufacturing to medicine - are at the cutting edge of technology, busy rewriting business models and human life cycles. But are we close to being run over by machines? Not at all. First, the ability to do everything requires more than brute compute capability. It requires the exchange of sophisticated and fine-grained knowledge between machines. But machines don't have a uniform way of collaborating between them. For machines to create a complete sum of all parts is decades away. The truth is that we don't even know all the critical factors and conditions required for such a level of connectedness, collaboration and knowledge exchange. Admittedly, we have technologies like Machine Learning, Neural Networks, Natural Language Processing, Cognitive Computing, but there are components that no one is even working on to bring singularity closer. For example, how do you create AI engines that can invent and create new innovations which are contrary to what it has historically learnt from past experiences? I'll leave you to think about this for a while and maybe discuss it a bit further in the future. For the moment, what I suggest is this: let's wait for Martin to

release Winds of Winter, which is the next part of the GoT epic. We can then compare what the AI has written with the work of Martin. We'll know who the real master is. [i] https://www.sciencealert.com/everyone-s-so-sick-of-waiting-for-the-next-game-of-thrones-book-an-ai-just-wrote-it-for-us [ii] https://www.youtube.com/watch?v=whv-krWnq0g [iii] https://spectrum.ieee.org/robotics/medical-robots/would-you-trust-a-robot-surgeon-to-operate-on-you [iv] https://www.youtube.com/watch?v=GUdnrtnjT5Q

#### Can you make a trust fall with AI?

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/can-voumake-a-trust-fall-with-ai/ ---- Contact Wipro Please fill the required details to access the content Can you make a trust fall with AI? December | 2017 Originally published in LinkedIn Is Artificial Intelligence (AI) becoming too human for your taste? Many people are uncomfortable with the fact that machines will one day begin to think like humans. That, as of today, is a remote possibility—human thinking is driven and controlled by an invisible factor called "soul". We have soul, a conscience and a sense of ethics that shapes our behavior. We become intelligent, almost unsupervised, assimilating and processing ideas, events and people with a unique and often inexplicable lens. Artificial Intelligence, on the other hand, depends strictly on patterns, policies and training. When a doctor recommends treatment, we tend to trust the doctor's opinion. That is because we can ask the doctor why a particular course of treatment was recommended and we'd get an explanation. Doctors (humans) are transparent. There is another factor that favors the doctor—accountability. Transparency and accountability build trust. But when AI looks at an image and says, "That is a cat", it can't say why it thought the image was a cat. AI is a black box. And a black box is difficult to trust. Besides, a black box has very little accountability. When AI begins to explain decisions, judgment, conclusions, recommendations, standpoints and ideas—in other words when AI becomes accountable and transparent—we'll begin to trust it. "Explainable AI" is what we call it - and it is the holy grail of computer science. It isn't that doctors don't make mistakes. There is ample evidence they do. The litmus test is between the errors a doctor makes and that which an autonomous vehicle makes. You would perhaps still continue to trust the doctor, but not the autonomous vehicle. Let's examine a near-real scenario. What will an autonomous vehicle do when a person crosses its path? Should the vehicle save the person on the street or the person in the car? This is a philosophical debate about ethical decisions. What if the person crossing the path of the vehicle is a baby? The world over, humans would take the same decision: save the baby. But what if the vehicle also had a baby inside? What would the vehicle do? It can't take a decision the way a human with a conscience would; all the vehicle can do is what it was programmed to do. The real problem here is that feelings, emotions, relationships, values, morality and ethics are fluid ideas. They change depending on age, sex, culture, profession and environment. This presents a level of complexity for a programmer and for self-learning systems that is beyond comprehension. Let me use another example. Let's assume that in 20 out of 20 cases in a

hospital, when a surgeon was faced with the choice of saving a mother or her new born, the surgeon choose the baby. If AI was trained using this data, we would get the same decision until eternity. We know that available data supports the decision; but we also know that there is something deeply wrong with this method of arriving at a decision. We know it is wrong because we have feelings, emotions and values. We trust our conscience and moral values to unhesitatingly change the perfectly sane data-driven decision when required. There is nothing immutable about decisions for humans. That, in essence, is the difference between machines and us. We are now confronted with two divergent ideas: that trust can be built over a period of time especially when AI becomes explainable (and more so when it is combined with trust-building technologies like blockchain); but there is also no way to trust AI because it can't factor feelings and emotions into decisions. Trust does evolve over time. After all, we have begun to blindly trust pathology lab reports, Google maps, cloud storage and even auto pilot landings (the irony is we won't trust an autonomous car!). In each of those instances, we allow humans to resolve uncertainty. We let doctors interpret the lab report, Google provides us alternative routes to determine what is best for us, we can pick and choose models for cloud storage, and when auto pilot begins to go rogue aeronautical systems sound an alarm asking for the pilot to take over. As a technology leader and a computer professional my head says we must develop better AI. But my heart says we need to draw a line - and ensure that AI systems know their limits and gracefully hand over control to humans when necessary—at least until we can develop "Responsible AI" to go with "Explainable AI".

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# Content is king...but context is everything

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/contentis-king-but-context-is-everything/ ----- Contact Wipro Please fill the required details to access the content Content is king...but context is everything January | 2018 Originally published in LinkedIn We have been steadily moving to improve Human Machine Interaction (HMI). Text inputs (commands) using a keyboard and a mouse have evolved into GUI, speech and gesture recognition (natural conversations). The quality of human interactions will continue to improve as systems begin to decipher visual cues and audio undertones. Interactions will be refined as machines begin to see the context of words and interpret the pauses between phrases. There is an absolutely new world of frictionless interaction on its way. Facial recognition technologies, voice synthesis, speech recognition, text-to-speech are the wonderful breakthroughs in the past decade that are inching us towards frictionless interaction with machines. But there are gaps that continue to confound computer science. At Wipro we have built an interviewer. The interviewer understands cues such as a candidate's nod of the head, but it can't tell if the candidate is getting frustrated during an interview. But as we become better at emotional analysis, we'll have systems

that truly transform industries such as retail and banking, travel and education. And yes, HR will have better interviewers too! Machines are getting better at interpreting micro emotions. They can scan a face, for example, and say if the person is smiling or is angry. But they can't go much beyond the content. I am reminded of a television series that was popular around 2010 called Lie to Me[i]. The hero of the series, the brilliant and acerbic Dr Cal Lightman, could identify even the most imperceptible movements in a person and say if the person was lying or telling the truth. Lightman combined his observations of micro expressions with applied psychology to arrive at conclusions in a variety of criminal investigations. But more importantly, he had the luxury of context. He could interpret expressions because he knew their context. This is the gap HMI technology has to bridge in the coming years. HMI that uses gestures and speech must also understand the underlying context, intent and emotion - stress, fatigue, irritation, boredom, frustration, dissatisfaction, happiness, pleasure - to improve the interaction. Pioneers that are building computational platforms for natural and human interaction with machines, will soon offer better tools that enable emotional sensing and contextual interpretation. Models are also being built to support these systems. The models can interpret fuzzy attributes such as sarcasm, humor, cynicism and skepticism. All of which tells us that multi modal HMI is ready to bring about a major transformation in our relationship with machines. [i] https://en.wikipedia.org/wiki/Lie to Me

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# What will the Job Descriptions of tomorrow look like?

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/whatwill-the-job-descriptions-of-tomorrow-look-like/ ----- Contact Wipro Please fill the required details to access the content What will the Job Descriptions of tomorrow look like? March | 2018 Originally published in LinkedIn New skills have become the topic du jour. Every day, jobs are disappearing only to be replaced by new ones. Technologies like Artificial Intelligence (AI) and Machine Leaning (ML) are being applied to everything. Who needs experience as a fisherman when AI can tell the difference between albacore tuna and yellowfin?[i] Who needs grey-haired selectors when ML can determine the balance of batsmen and bowlers in a cricket team?[ii] By now you've perhaps guessed where this is going: What will the Job Descriptions of tomorrow look like? In the mid-80s, when I started my career, I used to be sent to attend to customer complaints when their IT systems went on the blink. I would go alone, with no Internet to help, and the only knowledge base I could access to was in my head. I had to know everything, from COBOL to crimping RJ-45 connectors into a CAT6 cable. It is difficult crimping those tiny Register Jack 45s to the thick CAT6 cables -- just in case you didn't know. I was the Swiss Army Knife of customer care. They could send me to fix anything. Fast forward 15 years, to 2000. You have a problem with your data base? Call a Java expert. Your procurement engine has hiccups? Get a SAP expert. It was the age of specialization. Every skill was

compartmentalized into boxes. The Java guy would never know why the procurement package was running slow. Everyone had deep knowledge, which was good - but also a little frustrating, if you know what I mean. As an industry, the compartmentalization of people into specific areas and roles -Java programmer, DBA, system analyst, network architect, tester - worked very well for this period of globalization but has created a fundamental problem moving into the new digital era. Things have come full circle. We want multidisciplinary people again. We want the banker to know how to assess risk or make an investment and also know blockchain. We want Tshaped people who are Jack of all and master of one. Or  $\pi$ -shaped people who are specialists in two areas with a broad layer of knowledge covering both. Or x-shaped people who can deal with diverse teams and domains who thrive at the intersection of the possible. But one thing is certain - all L1 type requirements will get commoditized and go to chat bots. Knowledge bases will be idiot-proof. Technologies like Augmented Reality and Virtual Reality will re-cast everything. For example, there will be no need for a person to come and provide you a demo for the new washing machine you just bought. An AR/VR system will demo it for you instead, at your own time, without intrusion from a service agent. Basically, what defines an expert will change. The real expert will be the person who has broad domain knowledge, extreme customer focus, and the creativity to assemble and implement solutions. The tools to diagnose any type of problem and access any type of information, expertise and community wisdom will be available. All it will take is the spirit to mix the right information, add a dash of innovation, and give it a good stir. [1] http://fortune.com/2016/11/14/deeplearning-artificial-intelligence-tuna-industry/[1] http://js.sagamorepub.com/ ajess/article/view/2803 ================

# Innovation through combination of technologies

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/ innovation-through-combination-of-technologies/ ----- Contact Wipro Please fill the required details to access the content Innovation through combination of technologies October | 2020 Historically, the most disruptive and long-lasting products were not built through a single, emergent technology. Rather, they were built through a combination of existing technologies, innovation and new business models that appealed to customers. Products built on an innovative, but independent, technology often struggled to achieve wide adoption. Minicomputers, for example, did not find widespread acceptance in enterprises until they layered on data storage and management platforms. Pagers and early clamshell texting devices did not have the longevity of cellphones. Individual technologies are often innovative and disruptive, however, the value proposition and the disruption they offer is significantly higher once utilized in combination with preexisting technology or another emergent technology. Today, forward thinking enterprises are reaping huge benefits by incorporating technological advances into older processes, platforms, and products. For example, Artificial Intelligence (AI) has been around for quite some time,

and for much of that time its disruptive potential has been widely discussed, but narrowly implemented. However, with the emergence of Cloud, Big Data technologies, and low-cost compute, AI has found widespread acceptance in enterprises. Where AI was once a curiosity, it is now regarded a critical component to any enterprise strategy. As another example, texting has been a form of communication since 1990s, but widespread adoption came only after mobile phones became popular and layered in messaging as a core utility of the device. Combinatorial technological innovation is visible in most, if not all, of the current leading technology products. Things like 3D Printing, IoT, Drones, Robotics, Machine Vision, Machine Learning, Cognitive Computing, Data Discovery, AI, Natural Language Processing, Blockchain, and more, were built by bringing together previous innovations to create exponential gains in value and applicability. It is not necessary to reinvent the wheel to gain a competitive advantage. Two or more disruptive technologies in the right combination will do just fine -- the critical part is thinking through the ways two technologies leverage one another to enhance their collective value. When individuals or organizations get this right, the sum of the parts is far greater than their individual value. One plus one equals ten, or even one hundred, instead of two! The potential to marry multiple technologies into a single process transformation is very high for most business processes. Combinatorial technologies are creating super intelligent products and services everywhere you look. In a retail store, the ability to combine Computer Vision, real time Big Data analytics and IoT information can redefine the in-store customer experience. Technologies such as Object Detection, IoT, Augmented Reality and Haptic Feedback can be combined to create immersive learning/training/experience environments. A CNC lathe operator could use these technologies for training. Sport coaches could use it for training athletes. Oil & Gas, Utilities and Mining operations could use these to make field workers more efficient and improve safety. The Armed Forces could use it for military training without putting personnel in harm's way. Other examples of relevant technology combinations - Given the enormous amount of technological innovation and development happening, the critical element, once again, is thinking carefully about how technology can intersect and amplify. Choosing the right combination of technology, along with a deep understanding of the domain in which they will be applied, is essential to create relevant innovation. ===========

# Building great new apps quickly and efficiently

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build, deploy and run modern apps that extend your sales and service channels. In this blogpost we'll highlight how Heroku helps you to launch and grow a digital experience successfully. Heroku is the ideal platform to support you in this journey and by combining it with Salesforce you can unlock exciting new opportunities for your business by doing more with your CRM data. You can sync data seamlessly with your CRM, enabling you to build highly personalized apps that drive engagement, loyalty, and efficiency while managing the business processes behind it with out-of-the-box features in Salesforce. Tailored Digital Experiences Today's customers expect to get what they want with just a few clicks when interacting with your company. The app-centric Heroku platform can support you in digitizing virtually any interaction with your customers. It is designed to help developers deliver powerful and engaging apps quickly and efficiently. A tailored app can be useful for your employees as well. If those employees are working in Salesforce, the custom app could be embedded in the org, seamlessly combining the functionality on Salesforce and the development capabilities on Heroku. With this combination, any business process can be digitally supported giving you happy and efficient employees. Your web, iOS, or Android app can be built with a pixel-perfect design ensuring users enjoy the interactions with your business and are engaged as much as possible. Accelerate your app development To build a great experience you need to focus on building an amazing app instead of spending time on setting up the correct workflow, applying security patches and many other tedious tasks. Heroku takes care of all those tasks so you can spend your time where it matters. Your team won't have to reinvent the wheel and can drastically reduce time-to-market. For almost any app you'll need service providers for things like sending mails, storing data and files and monitoring performance. Heroku's unparalleled ecosystem contains more than 150 services from industry leading partners covering any needs your app might have. Choosing the best service couldn't be easier, making them available to your app in just a matter of seconds. Do more with your Salesforce data Heroku Connect makes it easy for you to build apps that share data with your Salesforce organization. Using bi-directional synchronization between Salesforce and a Heroku Postgres database unifies the data in your Postgres database with the contacts, accounts, and other custom objects in the Salesforce database. Easily configured with a point and click UI, it's simple to get up and running in minutes - no coding or complex configuration required. Thanks to this your users can have a tailored experience in a web, iOS or Android app while the out-of-the-box features of Salesforce are used in the background to manage all the business processes. Operational Excellence & Scalability With user expectations higher than ever any operational hiccup can cause your app to frustrate or even lose customers. Thanks to Heroku's operational experience you can sit back and let the platform monitor the key indicators of app health, like responsiveness and request failures, alert you proactively so you can find (and fix) issues before your users do. Scaling your app servers or services is done with a few clicks, with cost being prorated to the second. Meaning that your Heroku resources can adapt to spikes in demand and closely match your app's growth making sure you have a cost-effective solution that always offers excellent performance. Security When you build and operate a mission-critical application with critical and sensitive data about your business and customers, nothing is more important than protecting the privacy of your

data. Heroku enforces developers to use best practices which avoid common security issues. Besides this the platform itself is subject to regular audits and complies to many security certifications. If you have enterprise security requirements there are options to cover these as well. Heroku Shield is a set of services that offer everything needed to build HIPAA or PCI compliant apps. While Heroku Private Spaces gives you network isolated groups of apps and services in a specific geographic region. This enables your apps to securely connect to on-premise systems on your corporate network and other cloud services, including Salesforce. Launch your app with Heroku When building an app to amaze your customers, you will want to get up and running quickly. Heroku is the ideal platform to accomplish this, the ecosystem and excellent developer experience remove any friction towards innovation. Once you have launched your amazing app, the platform's monitoring, scaling, and security enable you to invest in the roadmap of your product and not in operating it. Heroku handles the hard stuff so you can stay focused on improving the digital experience. If you want to take it even further, the combination of Heroku and Salesforce is unbeatable. You can quickly deliver new products and features that make users happy while Salesforce takes care of all the business processes behind it. Are you in need of a tailored digital experience for your business? Be sure to reach out and we will get you up and running in no time! Industry: Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business 

# How Einstein brings more intelligence to marketing automation

---- Arcticle source ---- https://www.wipro.com/blogs/wipro-insights/how-einstein-brings-more-intelligence-to-marketing-automation/ ---- About the Author Contact Wipro Related Blogs AI Driving 5G Innovations for Communications Service Providers Making ML Models in Banking Resilient using Adversarial Attacks Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Please fill the required details to access the content How Einstein brings more intelligence to marketing automation June | 2021 Ever since Salesforce brought the Einstein Artificial Intelligence (AI) engine to marketing, I have been amazed by the genius level you can now take Pardot and Marketing Cloud to. The

volume of data that Einstein can chew on is almost limitless, and the extra intelligence Einstein brings to your marketing toolset is extremely powerful. Pardot Einstein guides your sales and marketing people in making smarter decisions on who to market to, who to sell to and who to engage with, and when. This last recommendation is very important: if you talk to prospects or customers at the wrong time about your products and services, then the conversation is not going to go down very well. Pardot Einstein is the ability to talk to your prospects at the best time, so when they're ready for the conversation. That makes conversion much easier, of course. There are four amazing plug-and-play features in Einstein Pardot that I want to highlight to you: Einstein Behaviour Score, Einstein Lead Score, Einstein Campaign Analytics and Einstein Attribution. But before we go there, let me point out a couple of conditions you will need to fulfil to benefit from the true power of Einstein: you'll need Pardot advanced edition, we recommend having Pardot Lightning and you'll also need to have connected campaigns and engagement history. Important to know is that Einstein resides within Salesforce, not in Pardot: all the number crunching happens in Salesforce, so you should have your leads set up in Salesforce. Einstein Behaviour Score Einstein Behaviour Score measures the strength of a prospect's buying intent. The tool does that by taking behavioural data from engagement history, for instance how active a prospect has been in engaging with content on your site, how they participated in webinars, how they clicked on emails, etc. These engagement activities show that a prospect is engaged and is looking for information. This really makes it the right time to connect with the prospect and make the sale. A key factor in influencing this behaviour score is the 'recency' of the engagement, which makes this truly interesting. Are you critical of these scores? Remember: Einstein uses 'normalised scoring'. The beauty of using AI is that it learns and gets smarter over time. The more data you feed Einstein, the smarter it gets. Einstein Lead Score Einstein Lead Score does not look at the behaviour of people, it looks at the value of fields. What is most interesting here is that Einstein determines which current leads have the most in common with leads that have converted in the past. The higher the score, the more these leads have in common with leads that converted previously. The nice thing here is that you could set up an automation that sends these prospects emails or other assets to propel them on a journey, as soon as they get an Einstein lead score of 80, for instance. And here too, Einstein Lead Scoring uses normalised scoring with ranges between 0 and 100. Einstein Campaign Insights Einstein Insights does exactly what its name says: it helps you analyse the campaigns you have running and it picks up wisdom from these campaigns that would otherwise take you hours or days to find back in your regular campaign reporting. I promise you it will surface insights that you've never even considered. That's the power of AI, of course. This feature answers the question of what's exceptional about the prospect activity in this campaign versus all the other campaigns you have done previously. Of course, to make these comparisons, you'll need to feed the AI engine with data to learn from. Fifty connected marketing campaigns is the minimum here to get the engine running and to get this tool rocking and rolling. Einstein Attribution Released just this summer, Einstein Attribution provides you the answer to the eternal question that gets bandied between Sales and Marketing: what marketing efforts led to what sales opportunities? Einstein Attribution takes away the effort we traditionally

asked from Sales in adding contact roles and opportunities. It uses historical data to look at the actual journeys prospects go on and it tells you which campaigns attributed to which opportunities. Can you imagine doing that without the date-driven model of Einstein Attribution? All these new features are plug-and-play, which means they are really easy to switch on and get working. The common ground in all these features is their ability to find patterns that are buried deep in engagement data. They recognise themes, and can take action, for instance making recommendations to users. Believe me, this is truly amazing. Industry: Brian Coles Director of B2B Marketing Advisory, Wipro Brian Coles heads up the B2B Marketing Advisory for Europe. He is on a mission to transform marketing teams from a cost to a profit center. He is an author, podcaster and blogger and has spent years travelling around the planet on a motorbike. He's met many incredible people both on his travels and in organisations and wants to tell you about them. He is a Londoner, lives in Denmark with his wife and three children, and can't wait for you to read his new book at http://www.brian-coles.com. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the 

# How an open API landscape allows banks and insurers to safeguard their future

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/how-anopen-api-landscape-allows-banks-and-insurers-to-safeguard-their-future/-----Contact Wipro Please fill the required details to access the content How an open API landscape allows banks and insurers to safeguard their future July | 2021 Until recently, financial services were dominated by the urge to avoid risk. Nowadays, it's all about the customer and about experience. The drive towards customer experience has forced banks, insurance companies and other financial service providers to go digital fast. This trend has been accelerated by the breakthrough of FinTech players in the market, and also, of course, by COVID-19. The agility required is at odds with the legacy infrastructure at traditional banks. Software in general, and APIs in particular, are the solution to propel financial service providers into the future. Digitisation has changed consumer attitudes forever. The way we consume entertainment has changed, the way we shop has changed: everything has gone mobile. Financial services have to follow that trend. Not only do customers assume that onboarding - as a new customer - will be

seamless, they also expect to find financial information and services at their fingertips. This requires financial services companies to make data more easily available and to develop new applications more swiftly. Open banking: challenge and opportunity This openness has also become an obligation, since the PSD2 regulations force banks to exchange customer data with third parties. Fortunately, banks are turning this challenge into an opportunity, by building digital ecosystems that complement their own services with third-party applications in order to offer customers a broader portfolio of services. As Jean-Louis Van Houwe, president of FinTech Belgium, explained during a recent Wipro webinar, traditional banks have taken the opportunity to partner with FinTech players and are now sometimes offering over 30 different services through their mobile app, ranging from financial services to spending meal vouchers, buying parking tickets, paying for public transport, etc. APIs as the glue between old and new This would not have been possible without the advent of API technology, Application Programming Interfaces. These APIs unlock the data hidden in the closed systems that financial services traditionally have, and allow banks and insurers to connect new applications to their back-end systems, regardless of whether these are third-party services, or their own services. At Wipro, we partner with MuleSoft for APIs. MuleSoft's API-led connectivity platform Anypoint allows the IT department to develop APIs and manage their entire lifecycle while also taking care of connecting the APIs across the different layers in their organisation. Financial services companies can use Anypoint to leverage the power and data of their existing infrastructure, thus protecting their investments. What's more, once functionality is built in in the form of an API, it can easily be reused, saving precious development time. APIs at work HSBC is one of the banks that used MuleSoft 's API platform to build the bank of the future. By making the APIs available to business partners such as real estate agencies, the latter can, in turn, offer their customers a seamless experience of buying a house and getting a mortgage with HSBC, without going to HSBC itself. To the customer, this is all fully transparent. The bank is hidden but delivers services through its ecosystem. At another Mulesoft customer, Farmers Insurance, APIs are used to digitise insurance claims and payments. A claimant can take photographic evidence of a damaged vehicle and upload it directly in the Salesforce application. The claim adjuster can look at the evidence of the damage, estimate the claim value and pay it directly to the claimant or even to the garage performing the repair work. All the connections are made through APIs, which unlock the internal systems of Farmers Insurance and provide customers with an excellent customer experience. Bridging the differences The challenges for banks, insurance companies and other financial services organisations are huge and they have to strike the right balance: the balance between being very safe and very agile, between protecting investments and innovation, between being open and being secure, etc. Software, and APIs in particular, are bringing the solution and offer the best of both worlds to the financial services industry. Interested in finding out more? Then listen to our recorded webinar. Or contact us for more info.

### 3 Fundamentals You Need to Win in the 4th Industrial Revolution

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/3fundamentals-you-need-to-win-in-the-4th-industrial-revolution/ ----- Contact Wipro Please fill the required details to access the content 3 Fundamentals You Need to Win in the 4th Industrial Revolution July | 2021 With the advent of digital transformation in manufacturing, business and IT leaders are clamoring for new technologies like Artificial Intelligence (AI), 3D platform printing, and the Internet of Things (IoT). As a result of the widespread excitement and high expectations of a tech-driven future, manufacturers are too often buying tools and platforms without having the right foundation to realize short- and long-term returns on their investments. At Appirio, we make digitizing business operations easier for manufacturers by eliminating complexity. We help our clients assess their existing systems and data repositories, refine their business needs, and put performance tracking metrics in place to ensure they're continuously improving and realizing value. Considering purchasing frontier technologies? Here are three key fundamentals to align your team and reach consensus: Fundamental #1: Connected systems and unified data repositories should be the bedrock of your digital transformation. Do your finance, sales, and services team operate in different internal systems during their workday? Do these systems tie together through integration solutions? How often do you receive a file with the dreaded 'version' as part of the title? With 12+ years of system integration and implementation experience, we're passionate about the promotion and development of integrated systems that support visibility, transparency, and ease of use. A unified back end is especially important when considering an IoT, big data, or AI investment. If the system does not extend across the full product lifecycle or purchasing cycle, the reporting and analytics that make connected devices and AI so beneficial won't live up to their potential - and the business insights your team needs will remain siloed and unactionable. To make innovative investments without a unified system of truth is like wearing your new white shoes out in the rain - messy. Fundamental #2: Invest in systems and partners that support and understand your business needs. When evaluating the vendors and partners who could be part of your digital transformation, it's key that they're wellversed in the realities and difficulties of the manufacturing landscape - not just knowledgeable about their own technologies or partners. Partners and vendors who build and deliver projects with the specific needs of manufacturers in mind will be more valuable in building business cases, operationalizing products and platforms, and measuring the return on your investment - because they've already done and mastered it. Which brings us to our third and last fundamental... Fundamental #3: Get rigorous about identifying and tracking key metrics. Technology investments are no longer made and kept by IT alone. Business leaders and teams need to stay curious about the technological landscape and find new ways to improve their daily work experiences and meet and exceed their goals by using the platforms and tools their company purchases. Active workshopping with sales,

### Maximize ROI in Manufacturing with Marketing Automation

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/ maximize-roi-in-manufacturing-with-marketing-automation/ ----- Contact Wipro Please fill the required details to access the content Maximize ROI in Manufacturing with Marketing Automation January | 2022 Marketing Automation is an area of focus for manufacturing organizations facing the challenge of migrating from legacy siloed systems into a world of connected platforms. Determining which tools to invest in and selecting an implementation partner can be a daunting task. In response to this need, the Appirio team has created a resource to help bring clarity to how we help our manufacturing clients leverage marketing automation to achieve their business goals. The following use cases provide a guide on how Marketing Automation is used in the manufacturing industry today and why many companies are seeing an incredible return on investment. Nurture Leads from a Trade Show or Online Event Sales teams are most effective when they can focus their time on qualified prospects that have a realistic opportunity to close. Sales teams are often inundated with leads after an event, and figuring out which leads are worth prioritizing may be left to personal preference. Pardot helps provide a data-driven solution with a suite of tools that allows users to easily create forms, build landing pages, score engagement, and create automated campaigns. This system nurtures leads until they qualify to be passed to a member of the sales team. All Pardot data can be passed to Salesforce CRM (or another CRM) to ensure the data is consistent across all platforms. Increase Overall Customer Market Share Many organizations have aggressive goals for maximizing the lifetime value of a customer. In today's economy the best way to earn additional client market share is to have reliable 1st party data available in their systems. This is achieved first when connected equipment in the field passes data from that machine to the organization's CRM. Once that CRM is connected to Marketing Cloud, the incoming data can trigger a 1:1 customer journey in Journey Builder. Some examples of customer journeys might include: Enhanced Customer Service Salesforce

Marketing Cloud has the advantage of being an embedded tool aggregating data rather than siloing from the rest of the organization. One of Journey Builder's most popular features is its ability to update Sales Cloud records and create Service Cloud cases within the standard functionality of the tool. The Service Cloud component enhances the traditional "follow up" email by ensuring that every customer has an opportunity to provide feedback. In the case of a customer responding to indicate an unsatisfactory experience, a Service Cloud Case can be automatically created, routing the issue to the proper channel with the goal of restoring the relationship. Bringing the Vision to Life The scenarios listed above might seem like an ideal "future state" but with the right implementation partner this transformation can take place in a matter of months. All the tools needed to provide next-level customer service is embedded within the standard platform. Let's learn how we can build the customer service scenario listed above in 5 steps: Selecting the Right Partner Many consultancies & ad agencies offer a certain level of Marketing Cloud offering. While every client has individual needs, the most important aspect of a successful Salesforce Marketing Cloud implementation is having a team with cross-cloud experience. It is essential that the project team understands the impact of how modifications in one cloud impact the overall architecture. Wipro Salesforce Practice prides itself on being a Salesforce Platinum Partner and one of the top names in the industry. If you are interested in exploring if Marketing Cloud, Pardot, or any other marketing automation solution on the Salesforce platform might be the right solution for your organization, our team is here to answer any 

### What's Holding You Back from a Connected Supply Chain?

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/whatsholding-you-back-from-a-connected-supply-chain/ ---- Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content What's Holding You Back from a Connected Supply Chain? July | 2021 Automotive suppliers and Original Equipment Manufacturers (OEM) face a myriad of disruptions in today's landscape: technological advances, global supply chains, workforce shifts, and regulatory changes. These obstacles are just a few of the aspects automotive companies must consider when building and improving business processes. As automotive suppliers and OEMs continue to navigate increasingly competitive global markets, it is imperative that suppliers and OEMs keep their essential supply chain priorities in focus. For suppliers The top priority is keeping an accurate pulse on fluctuations in customer demand ... in real-time. About half of automotive suppliers identify the alignment of operations and forecasting to customer demand as the top challenge facing their current operating model according to Industry Week. Forecasts and opportunity tracking, stored in a CRM system, should

integrate with the ERP and ordering systems that reflect OEM and aftermarket orders. This integration allows for greater accuracy and increased worker productivity by automating many of the manual forecasting processes. Appirio's supplier opportunity management framework reduces the headaches suppliers currently face when forecasting demand, while accounting for the individual needs of the business. For OEMs Manufacturers need insight and analytics to make decisions on component and parts suppliers. The top priorities for OEMs include supplier performance and capacity — and the majority of OEMs lack the historical data to make future decisions on supplier contracts. Proper tracking of supplier performance can allow OEMs to conduct improved root-cause analysis, improve buying for efficiency, and ultimately to improve the customer experience. Appirio's proprietary Warranty Management solution delivers supplier analytics dashboards, connected device management, and integrated field service capabilities to allow OEMs to handle day-to-day operations as well as innovate for the future. Regardless of sector, automotive companies need an empowered and enabled workforce to mitigate the challenges and priorities of the future. Appirio understands the deep connection between worker experience and company performance — and that any technology or process change should empower rather than burden workers. Reach out to our automotive team to hear more about our sector expertise, automotive research, and our Virtuous Cycle framework. Industry: Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to reexamine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. \_\_\_\_\_

# 3 tactical tips to make a CLM project succeed

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with minimum effort for the parties involved and maximum transparency in terms of reporting and version control, is a digital CLM (Contract Lifecycle Management) solution. When you are ready to implement this, it cannot be done without a plan. So here's three helpful tips to give you insight into the implementation of a CLM solution. The term 'Contract Lifecycle Management' refers to the applications used to manage contracts and agreements, from initiation to ongoing management and possibly renewal and termination. CLM solutions manage all legal documents that contain obligations that affect an organisation, as defined by market research agency, Gartner. 1. Eating the elephant What is especially important is to understand the benefits of CLM solutions for all parties. Both customerfocused and towards your internal employees. Combining this with the knowledge and challenges of your current organisation is essential. In this way you determine where the quick wins lie: focus points that can add a lot of value without making too drastic adjustments. Choosing such focus as the first phase of a project is essential to get employees to buy in. Afterwards, you will notice that they come up with ideas themselves and priorities on which you can build further. Moving heaven and earth to make that big, expensive project succeed will take a lot more effort than tackling the challenges one by one. After all, you also eat an elephant only bite by bite... 2. Ask the right questions How a contract is drawn up, what clauses need to be added, who has to approve it, what conditions can be negotiated; these are just some of the questions we ask our clients as consultants. We do this to have a good idea of the situation in which they find themselves and where they want to go. Workshops like this are always fascinating because not only do they give a better understanding of the processes, they also often facilitate internal conversations about the ideal way of working. The mix of these ideas and answers only becomes really interesting when you, as a company, have also guestioned your clients about their contract negotiations. Insights from this then not only lead to optimising the processes, the customer experience also becomes more elegant. This will lead to better bonding with customers and partners. If they know that your company can guickly go through that Contract Lifecycle, they will be more likely to agree to work with you. Theoretical discussions are, of course, only the beginning of the change. It's only after the first sprints that CLM solutions become more tangible for the project members. As management consultants we therefore insist that stakeholders are involved as much as possible during these developments so that their feedback can be used, in time, for the necessary adjustments. 3. Change of mentality It is not only a change of mentality for the organisation, the end-user must also cross the threshold called digitisation. Signing with a mouse click, downloading documents via a tool other than Outlook, storing nothing on the desktop this is a whole new world for many. In addition, there is also a major reliability aspect to this. There has to be sufficient trust in the way of working before someone signs his or her signature. The intuitive experience we can offer signers through CLM ensures this trust. If it is important for us, as consultants, to inform organisations about how to work digitally, it is equally important for organisations to convince their own customers and partners of the benefits of modern CLM. For them too, there are benefits such as having full documentation of all approvals that have been made until signature or having a faster model agreement to use a purchased licence and all this on a secure digital platform. Industry: Businesses set out to

### Five reasons why CLM and CPQ are a match made in heaven

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catalogue is the main building block that will drive your quoting process: what are you selling, at what price, how products can be bundled, how can they be discounted, etc. These are rules and basic principles that you need to lay down before you can start automating them. The same applies to CLM. As an organisation, you need internal commercial policies and agreements between Legal and other parts of the business involved in contracting. What are the rules Sales needs to play by? What are the preferred standard templates and legal language, but also what fallback clauses can Sales rely on without legal involvement to speed up the ease of negotiating? A very simple example is: if a sales representative can negotiate 30 or 60 days payment terms, what happens when a customer requires 90 days? Can Sales then propose other conditions to balance out the longer payment term? Or must Sales seek permission from Legal? With CPQ, the product catalogue is that source of truth, in CLM it's the legal playbook. The quality of data plays a key role and is important to have right before implementing, but also the implementation of CLM and CPQ raises the quality of data to a higher level. Maturity required As these policies are so important to allow CPQ and CLM to automate existing processes, a certain level of maturity is needed before an organisation can embark on a project. We recommend performing a Quote-To-Cash organisational readiness assessment to see what gaps need to be filled, followed up with a solution design phase to fill that gap, prior to the start of an implementation. The readiness may vary from one industry to another. For example: companies in a highly regulated environment (pharma, financial services,...) will probably have well-documented processes that are easier to automate. Implementing a CPQ or CLM solution is an important reality check for an organisation that requires the appropriate preparation and design. By combining both, the maturity level of your entire organisation gets a boost to its professionalism. Improving efficiency, saving money An important KPI of both CLM and CPQ is higher efficiency at less cost. By eliminating manual tasks (automation) and by providing a single source of truth, massive efficiency gains can be achieved. If all the data needed to make quotes or contracts is correctly entered into Salesforce, it will take a lot less time to prepare and manage these documents. Experience from past customer implementations shows us that the time to get a contract off to a customer can be reduced from 48 hours to just a couple of minutes. The same time savings apply to making a quote provided all the correct data is available in the system. What's more: by having pricing policies, using pre-approved templates and providing a legal playbook, the need for internal discussions and negotiations between business units is reduced, again saving time and speeding up the quote-tocash process, both from a pricing and contracting perspective. So you can double your time and cost savings by implementing both CLM and CPQ. Require change management CLM and CPQ solutions may feel guite intrusive and a big shift in the way of working for anyone in Sales, Legal, Finance, Operations, ... Sales may feel like they are less free in their pricing negotiations, while Legal may find they are losing influence. Implementing CLM and CPQ requires sound change management to ensure that everyone is using the new system to the fullest. Each department has grown attached to its professional freedom. The trick with effective change management is in showing every professional what's in it for them. This will play at different levels: a CEO wants a holistic insight of his sales and contract portfolio with

a few clicks to make the appropriate strategic decisions, middle management is looking for a way to better oversee their team's performance to allow them to support where required, while the employees themselves are seeking convenience and ease of use that allows them to focus on doing business, rather than administration. Many businesses face resistance to change. Change Management is not about sending out a weekly update over email, it is about a clear process of identifying areas of concern and addressing them. Based on experience from CPO and CLM projects alike, I'd recommend letting an external party advise and manage the change process. While there is a lot more to say about CPQ and CLM, a successful implementation of QTC will lead to higher internal efficiency, increase a business's compliance and provide customers and prospects with a better customer experience. To achieve this, three C's are important to lay the appropriate foundation to allow a seamless QTC process: CRM as the foundation for the customer 360, augmented by CLM and CPQ. While each of these C's hold their value, it's the synergy of them that will underscore that the whole is greater than the sum of its parts. Add Change Management to that mix, and you get an even more powerful 4 C's. Industry: Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business benefits that come with them.

# Cloud First Strategy or Cloud Only Strategy?

---- Arcticle source ---- https://www.wipro.com/blogs/wipro-insights/cloud-first-strategy-or-cloud-only-strategy/ ---- About the Author Contact Wipro Related Blogs Cloud Economics: Driving Business Value Through Discipline De-Risking Mainframe Modernization for the Banking Industry The Day After: De-risking Legacy Modernization Please fill the required details to access the content Cloud First Strategy or Cloud Only Strategy? September | 2020 Organizations, big or small, will see a slew of innovations in the coming months that will bring mature cloud services into sharp focus with their need for scale in a COVID-19 world. Considering multi cloud services as a viable option for withstanding the changing dynamics will pave the way for data risks, increasing infrastructure year-on-year cost, applications operations and performance issues. However, as enterprises take this path, they face complexities in designing robust architectures that can leverage multi cloud services. For most organizations in India, a hybrid model of both

private and public cloud will be beneficial in scaling existing services and at same time, going cloud-native to design and develop new applications on PaaS using a DevOps approach for rapid rollouts. This demands development of strong engines, which can control the entire cloud framework and provide flexibility to the organizations. There is always a debate around whether to make cloud as the only strategy or start with cloud as the first strategy. For a business, it is critical to understand which application and service to move to each type of solution and which cloud solution to choose to meet the business needs. The decision becomes important to help users in defining various operational costs and tracking the changing variable rates. Business users require the flexibility and agility to add or remove resources on a need basis, with a lead-time of minutes rather than weeks. This allows matching resources to workload more closely and provides the organizations with the ability to transfer risk related to resources. Based on a holistic evaluation of each workload's attributes, multi cloud services can help organizations choose the most appropriate delivery vehicle for their workloads, thereby ensuring effective movement of their production workloads. I strongly believe that for optimum usage of multi cloud services, organizations also need to have the ability to auto-provision cloud services and analyze the services in terms of performance. Software such as cloud brokerage can provide automated selection of the right cloud services to provide the best performance, reliability, security, and cost efficiency. Organizations can therefore benefit from the interoperability of public and private cloud-based services, common management and governance and security services. Another critical topic which I often come across is 'security' of data while using multi cloud services. Although I believe that cloud computing environment is as secure today as the vast majority of in-house IT environments, encrypting data before placing it in a cloud will be even more secure than unencrypted data in a local data center. Apart from security and governance issues, the selection of right cloud products and services is a major challenge for organizations. Therefore, organizations are looking for options wherein they pay for use of cloud resources on a short-term basis as needed and release the resources post that. This will enable variabilization and adaptation to usage patterns and will provide confidence to organizations in embracing cloud as a strategy in future. For enterprises across, it would be wise to reduce their operations costs and channel the savings into new cloud initiatives. Enterprises should attempt to extend the life cycle of their existing assets before considering a refresh, while simultaneously moving to a subscription-based, pay-as-you-go model rather than footing steep licensing bills. However, the cloud journey doesn't end there. Goal-oriented and highly motivated businesses will use their cloud credits to support proofs-of-concept and other essential services. One way of doing this is to containerize applications and remediate end-oflife issues around OS, improving computing density and rationalizing OS licenses for cost savings. The other established route to achieve savings is to outsource value streams to trusted partners. 'Multi cloud services' as a strategy is no more in its nascent stage and I believe that the opportunities in this space are building up rapidly because of the growing adoption and focus on cloud native services by organizations. These are the enterprises that will seamlessly emerge out of any crisis like COVID-19, as they shall find themselves in a completely new paradigm of digital transformation. Industry: Sanjeev Singh Head of India Business (SRE & Products) | Chief

Risk Officer | Chief Quality Officer | Wipro Ltd. Sanjeev has over 25 years of senior leadership experience across the services and industrial sectors in client management, business development, operations, projects, and technology driven business transformation. Sanjeev has built empowered teams, managed large client relationships and achieved financial results for large businesses in challenging situations. He has led large teams, set up new businesses in India and the Philippines and managed large global businesses and teams spread across 15 countries. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business 

### A Strategic Bet on AI: How Wipro is Future-Proofing the Workforce

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/astrategic-bet-on-ai-how-wipro-is-future-proofing-the-workforce/ ----- Contact Wipro Please fill the required details to access the content A Strategic Bet on AI: How Wipro is Future-Proofing the Workforce In July 2023, Wipro made a \$1 billion announcement in its ai360 ecosystem, designed to infuse artificial intelligence (AI) into every solution, tool, and process the company uses internally and delivers to clients. This move highlighted Wipro's recognition that the future hinges not just on cutting-edge technology, but also on the human capital that will wield it. Since then, Wipro has trained nearly all employees in AI and has made upskilling and reskilling a cornerstone of its business strategy. What's driving this strategy? A deep belief that AI will reshape how we develop technology and deliver services to clients. Advances in AI and particularly Generative AI (GenAI) have changed the playing field when it comes to what will be required and expected of engineering talent in the future. In a world where AI can write code, the role of the software engineer will be reinvented. As AI augments more of the basic tasks across other jobs, future professionals will need to build deeper business and communications skills, such as listening and problem solving, as well as specific domain expertise that leverages AI to solve complex business problems. According to the Organization for Economic Cooperation and Development, technology will transform more than one billion jobs within the decade. As roles transform, new jobs — such as AI prompt engineers, language model trainers, and ethical AI specialists will be created. Cross-disciplinary capabilities, analytical skills, adaptability, and an ability to see the bigger picture will be critical to

success. While technical skills in machine learning, natural language processing, and deep learning will become increasingly more valuable, a broader understanding of how the technology is applied to real world problems to build ethical, responsible solutions will be just as important. A one-size-fits-all approach to talent is no longer acceptable. This is why Wipro is increasingly looking at the talent puzzle from a holistic lens, building a talent strategy for the next decade by mapping out persona-based training programs and career paths for every category of employee from entry level to senior positions — so each employee can carve out their unique paths and build future-proof careers. Continuous learning and cross-skilling are essential to building future-ready workforces. Since July 2023, Wipro has trained more than 225,000 employees on basic GenAI fundamentals, while more than 30,000 employees have been trained on more advanced levels of AI based on their roles and personas. Wipro is also working with its ai360 ecosystem of partners to provide associates with ongoing specialized learning pathways with partners like AWS, Google, IBM, Microsoft, and Nvidia. Further, we are partnering with top schools across India to fuel innovation in GenAI and nurture future talent. The Center of Excellence on GenAI launched in partnership with IIT Delhi is just one example of Wipro's commitment to driving ongoing innovation in emerging technologies as part of the company's \$1 billion investment in the ai360 ecosystem. More recently, the company has entered a partnership with the Indian Institute of Science (IISc) to offer employees a Masters in Technology program, which will focus on key areas such as AI, foundations of ML/AI, data science, and business analytics to help sharpen technical skills in these high-growth areas. Finally, a deep domain and consulting expertise built both through organic and inorganic investments is also proving to be a true differentiator for Wipro in cross-skilling employees. Leveraging this deep domain and consulting expertise, the company is mapping delivery team leads to domain and consulting experts to enhance business acumen and industry knowledge across teams. Ultimately, the goal is to deepen business understanding and better leverage technology to solve very specific business problems. A vibrant and engaged talent culture requires linking career aspirations with ongoing learning to achieve long-term goals. Wipro's investments in its talent go beyond reskilling and training. The company is increasingly linking learning and development to career management, creating a holistic approach to career development that benefits both employees and the organization. Recently launched AI-powered Talent Marketplace, for example, places Wipro associates at the center and democratizes access to global projects. By matching associates' skills and growth goals to existing client demands, the Talent Marketplace empowers associates to actively chart their career paths, find new growth opportunities, and realize their ambitions. Ultimately, thriving in an AI-driven future will require us to infuse the technology into everything we do and apply it to our everyday work. Since the launch of ai360 last July, Wipro has been rigorously infusing AI technology into all its processes and tools to empower employees to enhance productivity and value, and to significantly improve the employee experience across the organization. As an example, working with its venture company, Avaamo, Wipro built a cognitive chatbot that has changed how employees work and interact with its systems. From simplifying leave management to updating time sheets and managing tasks, Wipro's cognitive chatbot now covers more than 40 diverse use cases, handling around 7 million gueries

since January 2023 with over 90 percent% accuracy. Further, Wipro has rolled out an internal GenAI (Lab45 AI platform) platform that enables employees across functions like HR, marketing, and IT to increase productivity and enhance their outputs. HR teams have been using GenAI to streamline candidate background verification processes. Marketing and sales teams have been using it to create content. Wipro engineers have been leveraging GenAI for software development and lifecycle automation, leading to significant productivity gains and execution at scale. Wipro is committed to investing in its talent to ensure they are ready to embrace the future with confidence. Wipro has long taken pride in building home-grown leaders and providing employees with fulfilling and rewarding career paths. With the advent of AI, the company is continuing this promise and doubling down on its goal of building a diverse, empowered, and high-performance workforce that will help lead the way into an AI-driven future.

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# How to make your IT organization digitally fit

---- Arcticle source ---- https://www.wipro.com/blogs/wipro-insights/how-tomake-your-it-organization-digitally-fit/ ---- About the Author Related Articles Contact Wipro Please fill the required details to access the content How to make your IT organization digitally fit March | 2020 Couple of years back, signals started pointing towards the Bimodal IT or Two-speed IT becoming irrelevant soon. In the article 'The idea of bimodal or two-speed is nearing its death', I had mentioned that the reasons for this change were primarily to do with people, and their insecurities and motivations. People drive changes more than changes driving people. So, it's obvious that establishing a smooth team structure is the foundation for any major change. Enterprises are experimenting with various organization structures and are trying multiple changes to make it work efficiently. This article is an attempt to consolidate the learnings and present guidance with some of the key roles necessary and their responsibilities. Design principles for the org structure The org structure guidance presented in this article is based on the following principles: Units of IT organization These are four distinct teams in the IT Organization (See Figure 1), whose responsibilities can be loosely de-coupled: Governance: This team defines the organization-wide frameworks, policies, platforms, tools, patterns and practices. It is multifunctional with technology, finance, security, risk and process skills. It is typically loaded with abstract thinkers, innovators and architects. Product Management: This team liaises with business users, collects requirements, conceptualizes reusable service offerings, assesses repeatability, engineers those services, builds the blueprints and templates to automate the offering, develops pricing for chargeback/showback and maintains a virtual P&L. Change Factory: This team takes every one-time change requirement (ongoing changes to the offerings are done by Product management team), atomizes the steps in micro-level tasks and leverages in-sourced/outsourced/crowdsourced workers to execute the change. Examples of changes

are Datacenter to Cloud transformation or Monolith to Microservices transformation etc. Operations: This team is responsible for Day-2 operations in an event-driven model. An additional responsibility, other than attending to incidents/service-tickets, is to identify automation candidates, develop runbook scripts, and add to the repository. Figure 1: IT organization structure Governance This is a team with multi-functional advanced skills. The roles include: Platform and Tools Architect: Responsible to define the requirements of hybrid multi-sourced IT platform, implement and manage it, integrate tools across different infrastructure providers Patterns and Practices: Responsible to identify commonly used application patterns, infrastructure patterns, assess re-usability and provide recommendations to the Product Management team Security and Risk: Responsible to define the security posture of the organization, distinguish the different security levels for applications and data, and provide guidance for the Product Management team to bake the requirements in every product that they develop Product Management Cultural change is required in IT organizations. Every service that they provide to the business users should be a "product" and it has to be dealt with in a product management fashion starting from ideation till revenue-recognition. The roles include: Business Liaison: Responsible for working with business users and Patterns and Practices team to define the requirements of the offering and feed the inputs to the Service Engineering team Service Architecture: Responsible for architecting the offering with right parameterization for re-usability Service Engineering: Responsible to design, develop and test the offerings Finance Controller: Responsible for developing pricing models for the offerings Change Factory This team is a mix of in-house, outsourced and crowdsourced workforces for managing large one-time changes. Atomizers: Responsible for breaking the large change into micro-tasks. The criteria to break tasks are: 1) one person can independently execute the task, 2) the person has role-based access only to that task and not the entire system Line Managers: Responsible for a given track of activity, establish the factory-line and populate manual or digital workers to progress on the line Operations This team is responsible for Day 2 operations and continuous improvement Automation: Responsible for watching high-traffic, high-effort manual activity to manage Day2 operations and developing runbooks and scripts to minimize effort and time. Incident/Problem Management: Responsible to manage incidents and service tickets requiring human attention. Looks like a massive change... How to? It's a major cultural change and plenty of re-skilling and normalization may be required to get to such an org structure. And it costs money. Some of the roles can be modified job descriptions for existing skillsets, but a majority will need reskilling. Practically, establishing this org structure could be a 12-18 months' timeline and it's worth the effort - a team with frictions and inefficient organization structure may cost more than the actual transformation costs. The roles and responsibilities are presented at a high-level in this article. For more detailed job descriptions, please reach out to govindaraj.rangan@wipro.com. Govindaraj Rangan Head of Datacenter Innovation Office, Wipro Govind has 23 years of industry experience across the breadth of the technology spectrum - Application Development to IT Operations, UX Design to IT Security Controls, Presales to Implementation, Converged Systems to Internet of Things, and Strategy to Hands-on. Prior to Wipro, he spent over 10 years at Microsoft as Technology Strategist. He has also worked in the

CIO/CTO organizations of Texas Instruments, Automatic Data Processing, D. E. Shaw & Co. and PCL Mindware. He has an M.B.A. from ICFAI University specializing in Finance, M.S. in Software Systems from BITS Pilani and B.E. (EEE) from Madras University. Professionally, he is MCSE, CISSP, PMP, ITIL Foundation certified. Data is an essential asset of all organization. Today, with technological advancements, data comes from umpteen number of disparate sources. Imagine your smartphone runs out of battery at a restaurant. Instead of hassling with a bulky charger, you simply place your gadget on a table and walk away. An hour later, your phone is fully powered up through the table-top, thanks to the wireless charger placed beneath the table. That's the power of wireless technology. There is something that binds Richard Branson, Elon Musk and the Dalai Lama. I believe it is their bold and influential brand of thought leadership.

## Spot the dot in the scattered #thenewnormal workforce

----- Arcticle source ----- https://www.wipro.com/blogs/wipro-insights/spot-thedot-in-the-scattered-thenewnormal-workforce/ ---- About the author(s) Contact Wipro Please fill the required details to access the content Spot the dot in the scattered #thenewnormal workforce October | 2020 The COVID-19 pandemic has brought the sharpest inflection point in the history of technology transformation. It is accelerating digital transformation, changing the ways of work and pushing us into the realms of unknown. Remote working was considered as a secondary option even a few months ago. It has now become our primary option and technology teams are posed with newer challenges to solve. Managing and securing the endpoints of a scattered workforce is at the core of many other surrounding challenges. Endpoint management and security solutions have been evolving since the advent of personal computers. It's a very crowded space in the market with a plethora of solutions, with some of them being present over 30 years. Most of these solutions catered to the basic hygiene functions such as distributing software, managing assets and gathering telemetry. They also presumed strong network connectivity and the security boundary of the corporate LAN. Tanium took the courage to enter into an already crowded space with a differentiated solution for scattered workforce outside the secured boundary of the corporate network. Spot the dot in a wider exposure Endpoints are no longer limited to a well-protected, high speed corporate network. People work from homes, parks or may be even kayaks in the middle of a lake! The connectivity is through Wi-Fi hotspots and shared networks. This expands a company's risk exposure with so many unknowns playing on various networks. Spotting a risk in such an exposure poses a very different challenge. Traditional endpoint management solutions had protocols and data transfers which were heavy, enabling communications between endpoints and management servers in scheduled intervals. With distributed workforce, we don't have the luxury of time to spot vulnerabilities. It needs to be in real time. The protocols and data transfer methodologies should be rewritten to meet this demand. Record to respond in seconds After

recording an incident, if identifying a comprehensive context of the incident, correlating dependencies and fixing the hole takes a lot of time, it gives the malicious community ample time to take control of the endpoint, giving them entry into our company's systems. It is necessary that the response is immediate. For the response to be immediate, the incident has to be presented with sufficient context and correlated views. Expanding the capabilities Imagine if there was a vulnerable endpoint detected somewhere. Its connection to the company network has to be retained, while blocking its access to critical enterprise systems. This cannot happen with an endpoint security and management solution alone. It needs to extend interfaces to be able to use the capabilities of network and firewall systems and 'safely quarantine' without erasing the endpoint from the network. Tanium provides both inward APIs and hooks to make this capability extension easy to implement. While remote-working provides the flexibility, it comes with opening doors for newer risks. Reimagining endpoint security and management is crucial in such highly distributed workforce, connecting to corporate systems through corporate and personal devices in different form factors such as desktops, laptops, mobile devices, VDI and Cloud-based workspace solutions. Govindaraj Rangan Head, Datacenter Innovation Office, Datacenter Practice, Wipro, Ltd. Govindaraj Rangan (Govind) is the Head of Datacenter Innovation Office, part of Datacenter Practice at Wipro Limited. He has 19 years of industry experience across the breadth of the technology spectrum - Application Development to IT Operations, UX Design to IT Security Controls, Presales to Implementation, Converged Systems to Internet of Things, and Strategy to Hands-on. Prior to Wipro, he spent over 10 years at Microsoft as Technology Strategist, working with some of the large Enterprise customers in India. He has also worked in the CIO/CTO organizations of Texas Instruments, Automatic Data Processing, D. E. Shaw & Co. and PCL Mindware. He has an M.B.A. from ICFAI University specializing in Finance, M.S. in Software Systems from BITS Pilani and B.E. (EEE) from Madras University. Professionally, he is MCSE, CISSP, PMP, ITIL Foundation certified. Vinay Diwakar Vinay is the Account Delivery Head of a US-based leading capital market infrastructure company. He has served the IT industry in various capacities for over 25 years. At Wipro, he manages large-scale geographically spread IT operations for large BFSI clientele. Prior to Wipro, he has worked with Citi, Executive Enterprises and Ispat Industries. Click here to download your copy of State of IT infrastructure https://www.wipro.com/blogs/anuj-bhalla/ ---- Contact Wipro Blogs By Author Digital Transformation in Delivery Enablement Functions: A key differentiator in the COVID era Why Employee Engagement is Critical for Customer Satisfaction in the COVID-19 Era Talent Engineering The path to a robust people supply chain Please fill the required details to access the content Anuj Bhalla Anuj Bhalla Senior Vice President & Global Delivery Head, Global Delivery Enablement, Wipro Anuj is a customer-centric leader with a passion for excellence and an unrelenting focus on rapid execution. He has a proven track record over two decades that spans Business Development, Practice Development, IT Strategy, Transformation, and Pre-Sales & Delivery for verticals such as Hybrid Cloud, Open Source/Open Stack and IoT. The first three quarters of the year 2020 have been marked by the continuous struggle of businesses to grapple with means to address the unprecedented disruption posed by the pandemic. The new normal calls

## Talent Engineering: The path to a robust people supply chain

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across DUs and SLs. The framework's effectiveness pivots on two factors: First, it allows BUs and SLs to take independent decisions based on their understanding of requirements; second, it holds one person—the TEH unambiguously responsible for optimal results. In a larger sense, the Talent Engineering framework is based on the guiding spirit of one Wipro. It eliminates walls between teams and encourage cross movement of resources while keeping delivery objectives and the customer in focus. Industry: Anuj Bhalla Senior Vice President & Global Delivery Head Global Delivery Enablement, Wipro Anuj is a customer-centric leader with a passion for excellence and an unrelenting focus on rapid execution. He has a proven track record over two decades that spans Business Development, Practice Development, IT Strategy, Transformation, and Pre-Sales & Delivery for verticals such as Hybrid Cloud, Open Source/Open Stack and IoT. Financial Services is one of the most challenging industries from a technology standpoint. Digital business transformation is now critical to the survival of virtually every organization, but effective change management must center on people. Successfully implementing automation systems might never be "easy," but platforms and solutions have emerged to make it as frictionless 

## Why Employee Engagement is Critical for Customer Satisfaction in the COVID-19 Era

----- Arcticle source ----- https://www.wipro.com/blogs/anuj-bhalla/whyemployee-engagement-is-critical-for-customer-satisfaction-in/ ---- About the Author Contact Wipro Related Blogs AI Helps Insurance Companies Make Smarter Decisions Why Digital Transformation Is All About People How to overcome the common barriers to Automation: 3 Emerging Trends Please fill the required details to access the content Why Employee Engagement is Critical for Customer Satisfaction in the COVID-19 Era July | 2020 In times of uncertainty, such as what we are experiencing now, customers are dependent on the service provider for newer and better ways to address their problems. Error-free execution with unwavering commitment becomes more important than ever before. Workforce commitment, mental and physical readiness, and motivation are the defining yardstick for a service provider's partnership with the customer, especially in crises like COVID-19. Thus, it's imperative to focus on the health and well-being of the workforce and have a comprehensive, employee-focused approach to engagement, ensuring optimal outcome for customers. There are various levers that will aid in this engagement with employees. These include: New employee engagement opportunities in the new normal Amidst this crisis, organizations must adopt newer and better ways of connecting with employees. Various roles could be transformed into newer roles for increased effectiveness. This will also open up new opportunities for employees to learn and grow. The blend of virtual engagement and the tea, coffee, water cooler huddles might just turn out to be the ideal hybrid solution to an effective manager's communication model. Collaborative

platforms have already turned out to be the new normal for engagement during COVID times, and this is likely to continue. Re-skilling can prove transformational for organizations. Employees are inclined to upskill amidst this crisis and various organizations are reporting about 2-3 times increase in virtual learnings. Online resources, podcasts and in-demand soft skills have been flooding the internet. This presents a unique opportunity for organizations to enable learning with customized and focused learning groups to nurture the next generation workforce, keeping the organization's larger goals in mind. Remote working also provides organizations with the opportunity to evaluate the freelancer model and try crowdsourced platforms. While this gives organizations access to quality resources to execute projects efficiently at a much faster pace, it also provides employees with the opportunity to work on multiple interesting projects to hone their skills, and gain expertise and experience in desired areas. Reimagining employee engagement for customer success This is the perfect opportunity to zero in on a diverse, ideal mix of employees needed for successful execution of projects. Organizational protocols that had been defined as necessary for years are now open to experimentation and workarounds due to this crisis. Organizations should leverage this opportunity to build employee-centric models, striking a good balance between optimal goals that are to be achieved for success, and making relevant modifications to existing models to drive excellence and customer satisfaction. In a nutshell, it's more about changing our mindsets than any major upheaval in our work environment. Remote working existed before COVID-19, today it is simply the way to work. As teams embrace the virtual environment, enterprises should be agile enough to provide a holistic and reassuring work culture so that people are adequately compensated with the necessary infrastructure to enable remote working and to fill in the vacuum of physical interactions in their day-to-day work life. Industry: Anuj Bhalla Senior Vice President & Global Delivery Head Global Delivery Enablement, Wipro Anuj has over two decades of proven track record across Business Development, Practice Development, IT Strategy, Transformation, and Pre-Sales & Delivery for verticals such as Hybrid Cloud, Open Source/OpenStack and IoT. Financial Services is one of the most challenging industries from a technology standpoint. Digital business transformation is now critical to the survival of virtually every organization, but effective change management must center on people. Successfully implementing automation systems might never be "easy," but platforms and solutions have emerged to make it as frictionless 

### Digital Transformation in Delivery Enablement Functions: A key differentiator in the COVID era

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guarters of the year 2020 have been marked by the continuous struggle of businesses to grapple with means to address the unprecedented disruption posed by the pandemic. One integral factor that has created a clear divide amongst companies is digital transformation. Companies with existing digital models and platforms have been able to mitigate the crisis significantly better than their counterparts. The transition to contactless and remote working along with network and security challenges needed an emergency intervention. The fact that a relatively mature digital company fared better in such circumstances comes as no surprise. However, an immutable truth is that the pandemic has served as a digital accelerator against the gradual incremental digital adaptation in the pre-COVID era. Transformations in the New Normal Although the transformation is continuous and will adapt to the raging circumstances of the pandemic, there are a few areas that have witnessed significant transformations in the past three guarters: Digital & Reskilling: The pandemic has provided a dual opportunity for the organization to focus on building a digitally skilled workforce and the workforce to leverage this downtime for upskilling. This digitally relevant workforce will serve as a competitive edge for businesses to sustain and grow in the market. Hybrid Workspaces: There is an ongoing debate on the effectiveness of remote working and working from office. One thing that can be stated with certainty is the pre-COVID era model will no longer be sustainable. Several flexible working models exist that blend elements of both remote and in-office working. Businesses, per their requirements and construct, can align to different ratios of this hybrid workspace model. Digital Platforms and Processes: This forms the foundation of any digital decision. Whether it's skilling or remote working, the experience, round-the-clock availability with consistency and zero errors can only be achieved through digital platforms. The pandemic has sparked these trends of extensive migration to the cloud, digital collaborative platforms, and intelligent processes. Automation and BOTs: The existence of automation and BOTs isn't something new. However, the pandemic has clearly highlighted the limited dependency that the business can have on personnel. This has certainly nudged businesses to revisit existing processes and implement cost-effective, scalable automated solutions as a replacement for manual processes. Wipro's take on Digital Transformation Wipro's robust digital footprint enabled it to seamlessly transition to over 98% of its workforce working from home without any significant effect on customer experience. As a trusted partner, Wipro has played an instrumental role in enabling its customers' seamless transition to a remote working model without any concerns of security and risks. As a forward-looking company, Wipro has taken definitive steps to emerge stronger from this crisis. This requires Wipro Delivery to revisit and revamp their functions with digital capabilities to drive the transformation from the core. Wipro has come up with a scalable, structured skilling approach consisting of micro learning, gamified trainings with credit points, hands-on assignments, SMEs' mentor sessions and online-proctored assessments to produce an able and skilled workforce. The number of learning hours on its revamped learning platform has shown a consistent spike in the last three quarters and the organization has an unwavering focus to sustain this learning cycle. Wipro had enabled consistent tracking of its Work Done by BOT (WDB) even during the pre-COVID era. However, post the pandemic, there has been extended rigor on implementing automated solutions and minimizing manual intervention to

the maximum possible extent. With less dependency on personnel, Wipro has continued to maintain a seamless customer experience. In terms of its own internal processes and portals, Wipro has moved on to revamp its digital platforms and make it easily accessible to both its internal and external customers. One such example is a new-age experience platform to hire team members and partners. It has a panoply of features, including the careers site to simplify processes, augment results, and deliver a hassle-free digital experience. This platform has streamlined the Talent Acquisition function and its processes to an effective and user-friendly interface. On the analytics and insights front, Wipro has developed an analytical and visualization tool for demand and supply essentials. It is bundled with various statistics based on demand to present the user with different dimensions and segregations to aid complete and conclusive information. The tool helps the user with a comprehensive picture of demand volume and volatility analysis across the organization and enables demand forecast based on current trends. Wipro has also developed a tool to assure improved search and coverage for skills. This is a self-service analytical tool with details about individual employee skillsets and talent availability within the organization. It has an inherent ability to quickly transform data from various sources into actionable insights for more informed business decisions. The above tools are a testament to strengthening of the Workforce Management function and speaks to the ease and visibility into the existing demand and supply of skills in the organization. This digital integration will pave the way for an accurate and precise demand projection along with a proactive supply management of niche skills through various levers of people supply. Transformation for readiness and future proofing It is quite evident that digital transformation maturity is imperative to determine the readiness of an organization to withstand uncertainties. Businesses may have varied approaches and degrees of implementation, which will determine the degree of relevance and position the business enjoys in the future market. The earlier notion of consistent and slow efforts has been wiped off. What this pandemic has brought onto businesses is a stress test and some very quick and calculated decision-making from a thoughtful and transformative leadership. There have been great learnings for organizations in these three quarters. Now the onus lies with business as to how they leverage it to emerge as a successful entity post pandemic. Anuj Bhalla Senior Vice President & Global Delivery Head, Global Delivery Enablement, Wipro Anuj is a customer-centric leader with a passion for excellence and an unrelenting focus on rapid execution. He has over two decades of experience across Business Development, Practice Development, IT Strategy, Transformation, and Pre-Sales & Delivery for verticals such as Hybrid Cloud, Open Source/OpenStack and IoT. Wipro has designed a Talent Engineering framework in response to these challenges. The framework has enablers in the roles of Talent Engineering Head (TEH) and Skill Family Heads (SFHs). The new normal calls for a change in mindset to enable employee-centric models that ensure optimal outcomes for customers and https://www.wipro.com/blogs/sahadev-singh/ ---- Contact Wipro Blogs By Author 5 Ways Airports Can Leverage Technology to Emerge Stronger from COVID-19 Impact Please fill the required details to access the content Sahadev Singh Sahadev Singh Global Head of Wipro's Engineering Construction and Operations services He is the Global Head of Wipro's

### 5 Ways Airports Can Leverage Technology to Emerge Stronger from COVID-19 Impact

---- Arcticle source ---- https://www.wipro.com/blogs/sahadev-singh/5-waysairports-can-leverage-technology-to-emerge-stronger-from-covid-19-impact/ ---- About the Author Contact Wipro Related Blogs Augmented Reality Transforms Facility Operations and Improves Business Continuity Relevance of Intellectual Property for Startups Please fill the required details to access the content 5 Ways Airports Can Leverage Technology to Emerge Stronger from COVID-19 Impact September | 2020 The aviation industry is undoubtedly one of the hardest hit by the COVID-19 pandemic. Airports Council International has estimated a loss of approximately 60% of passenger traffic and over US \$104.5 billion airport revenues in 2020 compared to 2019. As per International Air Transport Association (IATA), the passenger traffic will not return to levels before the pandemic until 2024. Traditionally, airports have enjoyed several years of continuous growth and never had to fight for their economic survival even during the recession period. However, the current pandemic has completely disrupted air travel, and airports are finding themselves in unchartered territory. While these are certainly challenging times, the new normal has laid out an opportunity for airports to reimagine the future and emerge stronger from the COVID-19 impact. And, technology will play a key role in enabling this. Based on our experience with leading airports across the globe, we share with you a practitioner's view on the five ways airports can leverage technology to emerge stronger from COVID-19 impact: 1) Enable contactless passenger journey and passenger engagement 2) Create non-aero / non-passenger Drive operational cost reduction 4) avenues of revenue 3) remote workforce 5) Ensure staff health and safety A resilient future led by technology Many new airport technology solutions will evolve rapidly, needing airports to be nimble and flexible, and embrace accelerated innovation in their approach. Airports are increasingly realizing that having a strategic IT partner can greatly help them navigate through these turbulent times. If the airports focus on the long-term strategic perspective, they can turn this crisis into an opportunity and emerge stronger on the other side. You need to make the right decisions to recover and succeed in the new normal. Connect with us here to know how we can support you on

this journey towards a resilient future.

Industry: Sahadev Singh Global Head of Wipro's Engineering Construction and Operations services He is the Global Head of Wipro's Engineering Construction and Operations services business. With over 26 years of experience in helping customers unlock value from their IT investments and drive business transformation strategies, Sahadev is a respected advisor to Wipro's EC&O industry customers and partners and a proven P&L leader within the industry. Sahadev's experience spans across a range of industry sectors including the Airports, Engineering & Construction, Real Estate & Facility Management, and Utilities industries Facility owners and operators are rapidly digitizing their physical space to improve the utilization... This paper presents an analysis of startups in the digital technology domain from the perspective of the World IP Day 2021 theme, "IP & SMEs: Taking your ideas to market". As per World Intellectual Property Organization (WIPO) this theme represents "Critical role of small and medium-sized enterprises (SMEs) in the economy and how they can use intellectual property (IP) rights to build stronger, more competitive and resilient businesses". ==============

### **Nischala Murthy Kaushik**

---- Arcticle source ---- https://www.wipro.com/blogs/nischala-murthy/ -----Author's Posts Contact Wipro Please fill the required details to access the content Nischala Murthy Kaushik Marketing Director - Innovation and Technology Ecosystems, Wipro Ltd. In her current role, Nischala heads global market positioning initiatives for the Innovation and Technology ecosystem at Wipro. She works at the intersection of transformative technologies, GTM (go-to-market) & commercialization of strategic themes, brand communications & creative storytelling and data inspired business growth insights. As the marketing partner and advisor to the company's CXOs and practice units, she crafts and executes high impact integrated marketing programs for areas like blockchain, open source, solutions for Apple ecosystem, HMI [Human Machine Interface], robotics / smart machines and the Open Innovation charter that front-ends strategic initiatives with academia, start-ups and VCs. In a career spanning more than a decade, Nischala has shouldered diverse roles in India, US and Europe being responsible for top-line growth, strategy, business innovation, thought leadership, marketing, customer relationship management and project execution. Nischala is a recognized expert on marketing, and was featured among India's Top 100 Content and Brand Custodians. She was also a Winner at the Rising Star Awards (Top 50), an Awards Recognition Program to highlight achievements of female talent in India. Nischala has done her MBA from IIM Bangalore. She loves to write, and is an avid blogger with bylines in The Economic Times, Financial Express, The Huffington Post, Thrive and The Times of India. Her blogs are featured among the Top Marketing Blogs in India, Directory of Top Indian Blogs and Most Widely read Indian Bloggers . You can follow her on Twitter @nimu9 or visit her LinkedIn page to know about her work. ==============

### The Humane edge of Technology

---- Arcticle source ---- https://www.wipro.com/blogs/nischala-murthy/thehumane-edge-of-technology/ ----- About the Author Contact Wipro Related Blogs Connectivity and Interoperability: Realizing the Full Potential of Comprehensive IoT Solutions Is Salesforce Right for My Nonprofit Organization? Beyond the Pandemic: Key Priorities for Agility and Growth Please fill the required details to access the content The Humane edge of Technology June | 2019 This is the reality for billions of people across the globe. For the longest time, these were mere statistics that changed every year. A number you read, possibly thought through and took with a pinch of salt, because well, what can be done about it? Then social media happened. Suddenly the stark reality of human condition is there for everyone to see right on their device screens. We see millions fleeing their homes, starving, living in poverty, living in darkness - and we want to do something about it. We care, and that makes us human. Technology made it personal. Today people from any corner of the world have access to help and support for their needs via many creative and innovative ways - powered by technology. Take crowdfunding platforms as an example - they are enabling people open their hearts and wallets to raise money for African kids affected by drought, to eradicate illiteracy, or for #SavingEliza who suffered a rare neurological disorder. For decades we have been talking about how technology makes businesses more efficient, effective, productive, and competitive. But we fail to acknowledge its contribution in making us more human. Today we are more connected as a community, able to reach out and help across borders, able to develop solutions that can help live better lives. Technology can and does make all these scenarios possible enhancing our wellbeing as individuals, communities and world at large. Not just at grassroots level, the impact of technology innovation is visible in every walk of life: Being able to create, to nurture, to emote, to connect, to be part of meaningful and sustainable change is what makes us humane. Technology is an enabler that provides new possibilities, opportunities and paradigms in helping us be humane. It is what we do that makes a difference. It's our collective responsibility to ensure technology is used to create the right kind of impact for individuals, societies, and nations. Every one of us is a stakeholder when it comes to 'making technology humane'. Are you doing your bit? References [i] http://uis.unesco.org/en/news/international-literacy-day-2017 [ii] https://www.businessinsider.com/the-worlds-unbanked-population-in-6charts-2017-8/?r=UK [iii] https://www.who.int/news-room/fact-sheets/detail/ blindness-and-visual-impairment [iv] https://mashable.com/2017/09/15/onebillion-people-dont-have-access-to-electricity/ [v] https:// www.bbvaopenmind.com/en/technology/artificial-intelligence/the-socialimplications-of-driverless-cars/ [vi] https://www.downtoearth.org.in/news/ climate-change/climate-change-set-to-increase-air-pollution-deaths-byhundreds-of-thousands-by-2100-58389 [vii] http://pubdocs.worldbank.org/en/ 710961476811913780/Session-5C-Pani-Baruri-Blockchain-Financial-Inclusion-Pani.pdf [viii] https://www.who.int/news-room/fact-sheets/detail/ blindness-and-visual-impairment [ix] https://www.wired.com/story/selfdriving-cars-rand-report/[x] https://blogs.worldbank.org/energy/grid-

bringing-power-millions [xi] https://wenr.wes.org/2018/08/educating-themasses-the-rise-of-online-education Industry: Nischala Murthy Kaushik Marketing Director - Innovation and Technology Ecosystems, Wipro Ltd. In her current role, Nischala heads global market positioning initiatives for the Innovation and Technology ecosystem at Wipro. She works at the intersection of transformative technologies, GTM (go-to-market) & commercialization of strategic themes, brand communications & creative storytelling and data inspired business growth insights. As the marketing partner and advisor to the company's CXOs and practice units, she crafts and executes high impact integrated marketing programs for areas like blockchain, open source, solutions for Apple ecosystem, HMI [Human] Machine Interface], robotics / smart machines and the Open Innovation charter that front-ends strategic initiatives with academia, start-ups and VCs. In a career spanning more than a decade, Nischala has shouldered diverse roles in India, US and Europe - being responsible for top-line growth, strategy, business innovation, thought leadership, marketing, customer relationship management and project execution. Nischala is a recognized expert on marketing, and was featured among India's Top 100 Content and Brand Custodians. She was also a Winner at the Rising Star Awards (Top 50), an Awards Recognition Program to highlight achievements of female talent in India. Nischala has done her MBA from IIM Bangalore. She loves to write, and is an avid blogger with bylines in The Economic Times, Financial Express, The Huffington Post, Thrive and The Times of India. Her blogs are featured among the Top Marketing Blogs in India, Directory of Top Indian Blogs and Most Widely read Indian Bloggers . You can follow her on Twitter @nimu9 or visit her LinkedIn page to know about her work. To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. Salesforce offers an incredible range of functionalities, making it difficult to find.... A report from Forrester predicts up to 20% of Fortune 500 companies will not make it through 2021 intact. "[For] some, their assets will be dissolved or purchased; others will just go out of business." One possible cause of this is a lack of strategy when investing in and utilizing technology. "The pandemic revealed the flaws in many companies' technology...and their tech leaders were found mired in Band-Aids like tech modernization, 

### **Putul Mathur**

---- Arcticle source ---- https://www.wipro.com/blogs/putul-mathur/ ----- Author's Posts Contact Wipro Please fill the required details to access the content Putul Mathur General Manager - Head Business HR, Wipro BPS An evolved HR professional with 14 years in BPM/IT industry out of her total work experience, Putul has been instrumental in defining and designing the HR processes for the industry. Her expertise lies in driving employees' engagement framework at a large scale, designing domain competence and talent management framework, managing large scale and senior level hiring and transforming HR processes to improve operational efficiency. She leads the PwD initiatives for Wipro and is a passionate exponent of Talent Analytics. Leading the Prevention of Sexual Harassment Committee for

## Building Confidence in Compliance and Credibility

----- Arcticle source ----- https://www.wipro.com/blogs/putul-mathur/buildingconfidence-in-compliance-and-credibility/ ----- About the Author Contact Wipro Related Blogs Innovation and Opportunities Drive Wipro and our Teams into 2023 Please fill the required details to access the content Building Confidence in Compliance and Credibility October | 2021 With disruptive technologies blurring the boundary between the digital and physical world - remote processing, teleconferencing, and co-working spaces are transforming how we live and work. New age service models that are emerging with cloud technology are not limited by geographical boundaries or space and time constraints. It has become imperative for all businesses to use technology to transform their HR practices. Today, when it is essential to acquire and retain the right talent within the organization, an HR process that requires an urgent digital touch is the Background Verification Process. Regardless of the size and the service, every organization conducts an employee background verification process to authenticate the information supplied by the potential employee. The information may vary from educational credentials, professional background, past criminal record, drug screening, and others, often depending on a clients' requirement or as required by law. Wipro's HR Shared Services (HRSS) is tasked with a high volume of monthly background verifications globally. With a 200K+ strong workforce, spread across 50+ countries and serves large enterprise clients across industry verticals, Wipro adds approximately 90,000 new employees each year. The background check process is managed centrally by the global HRSS team. Historically, diverse policies and processes in force further complicated the verification check requiring an extensive support network. It was, therefore, critical to reinvent the systems, policies, and processes across the organization to streamline the background verification process. Our whitepaper - Building Confidence in Compliance & Credibility highlights how Wipro's HR Shared Services team reinvented policies and processes to streamline candidate screening across geographies. Industry: Putul Mathur Vice President - Human Resources & Global Head - HR Shared Services Putul Mathur is an innovative HR professional with over 25 years of experience. She has been instrumental in defining and designing the HR processes for the industry. Putul's specialties include strategic HR, change management, leadership development, organizational transformation, and large-scale employee-engagement frameworks. She has designed and implemented shared-services models for all HR-related transactions, optimizing HR headcount in business partnerships and increasing efficiency by over 30%. Using advanced technologies like hyper-automation and AI (Wipro Holmes), Putul has driven the entire digital transformation of all HRSS processes, from hire to retire. Introducing these technologies has enhanced the overall employee experience and provided a more agile environment for all HR and employee

#### Anindito De

## Democratization of Data Science: Take a Cautious Approach

----- Arcticle source ----- https://www.wipro.com/blogs/anindito-de/ democratization-of-data-science-take-a-cautious-approach/ ---- About the Author Contact Wipro Please fill the required details to access the content Democratization of Data Science: Take a Cautious Approach August | 2021 The impact of AI on business-process transformation has had a remarkable impact on enterprise demand for data-science skills. The challenge, as with many tech-related issues, is meeting that demand. In just one year, the gap between demand and supply of data scientists in the US alone almost doubled, increasing from 150,000 to 250,000 based on data from LinkedIn and QuantHub. With more companies now accelerating their transformation projects, bridging that gap is critically important. New data science and machine learning tools offer augmented machine learning (AutoML) capabilities including 'no code' features that enable users who aren't trained in data science to analyze datasets and build statistical models at the click of buttons. These tools also include machine learning operations (MLOps) features that empower non-experts to deploy and manage machine learning (ML) models without involving IT teams. While these new machine learning tools promote democratization of data science and can help bridge the skills gap, they also pose possible risks. Organizations need to address governance and develop frameworks that ensure reliable results while adhering to ethics, fairness and security standards. What Could Go Wrong with the Democratization of Data Science? On the surface, making data analysis and machine learning tools more accessible throughout the organization sounds like a good idea. In theory, when employees have access to better data, better decisions and innovation are possible. Unfortunately, risk factors are compounded with the surge in democratization of data science. Having access to data does not always translate to thorough analysis and smart decision making. Data-science democratization comes with a high possibility of undelivered results that

erode stakeholder confidence across the enterprise. Businesses need to identify how these risks can manifest and understand the gravity of the repercussions: Mitigate Risks with a Well-Defined ML Governance Model Developing a governance model that addresses data science and machine learning tools can mitigate the risks of democratized data science and align all data analysis endeavors to corporate goals. Start by establishing an AI Center of Excellence (CoE) with a clear charter for ML governance. The AI CoE will enable democratization of data science to be meaningful and effective, and it can easily mitigate the risks identified above. For effective operation, the ML governance team should be cross functional in nature, consisting of business SMEs, data architects, a Chief Data Scientist, an infrastructure operations team, information security experts, and ethics and legal experts. This team -- actively involved in conception and deployment modelling -- should review proposed data experiments, which datasets are needed for the experiment, the model development process, and the conditions under which models are expected to be implemented at scale. The ML governance model should cover functional alignment, data reliability, and data science approach. Functional Alignment The AI CoE needs to have the necessary processes and policies defined as foundational assets to support functional alignment. This includes validating the problem statement and ensuring that the analytical approach and data sources are correctly identified, while data confidentiality policies, model ethics, and fairness norms are followed. Data Reliability The most efficient way to encourage use of reliable data sources is through a data marketplace or a data catalogue where the citizen data scientists can visit, browse, and select certified datasets and data sources for their experiments. These data assets need to be annotated for ownership and refresh frequency, accompanied by a data dictionary, and certified for quality, with exclusions and inclusions clearly documented. Data Science Approach While default options for model development from AutoML do work in a wide range of scenarios, there is always a risk of wrong formulation of the problem statement; incorrect interpretation of results during exploratory data analysis, feature engineering, model selection and validation; and incorrect selection of model performance measures. The data science approach review helps identify and resolve these gaps. It also validates proper consideration of infrastructure sizing in the production environment. The objectives of the ML governance team are to ensure: A democratic government enables citizens to contribute toward progress, but it requires robust institutions of governance to function properly. Similarly, the technology enablers driving democratization of data science need to be accompanied with the necessary governance frameworks. With this understanding and preparation, democratization of data science can be realistically expected to deliver on the promise of wide adoption in the enterprise, eventually leading to higher efficiency, a better customer experience, and greater business value. Anindito De Practice Head, Data Science, Wipro Limited Anindito has approximately 22 years of experience as an AI, data, and analytics professional. He has a successful track record of building innovative platforms and solutions and implementing AI at scale for enterprise clients. He has post graduate degree in Operations Research from Indian Statistical Institute, Calcutta and a degree in Mechanical Engineering from 

### Revolutionizing Healthcare Contact Centers with Generative AI

---- Arcticle source ---- https://www.wipro.com/blogs/anindito-de/ revolutionizing-healthcare-contact-centers-with-generative-ai/ ----- Contact Wipro Please fill the required details to access the content Revolutionizing Healthcare Contact Centers with Generative AI GenAI is redefining productivity, user experiences, and cost efficiency, bringing a new age of contact center performance to the healthcare industry. intelligence has played a role in the healthcare industry for decades. However, with recent advancements in Generative AI, healthcare companies see opportunities for accelerated AI-led transformation. Wipro is currently working with multiple healthcare companies to enhance the member experience and streamline the claims adjudication processes with GenAI. Increasingly, GenAI will not only improve the overall efficiency of operations but also enhance the quality of service extended to providers and members. In the past year, healthcare companies have been actively exploring how GenAI platforms can improve their operations. They see opportunities related to regulatory compliance (report generation), claim-related predictions, auto-adjudications, and clinical notes processing. In the near term, they are most excited about how GenAI might transform their contact centers. Contact centers are the key touchpoint between the healthcare provider and the member, and they have become major cost centers for healthcare providers given their central role in processing claims, policy enquiries, member onboarding, and provider complaints. If GenAI can make contact centers more efficient while simultaneously improving service levels and customer experiences, the ROI will be rapid and obvious. How Wipro and Nvidia are Addressing GenAI Challenges for Healthcare Call Centers Because GenAI can rapidly process human language and provide nearinstantaneous contextual responses, it seems purpose-built for automating simple customer support functions. In reality, delivering a GenAI platform that can reliably and consistently deliver best-in-class customer support is more complicated. The major challenges include: A recent partnership between Wipro and Nvidia is bringing powerful new GenAI capabilities to the healthcare sector, including for contact centers. Wipro's Gen AI Studio (WeGA) has multiple tools specifically built to address these challenges and fast track the development of contact center solutions for healthcare. As an example, WeGA has ability to process the complex structures of policy documents and create a streamlined Retrieval-Augmented Generation (RAG) pipeline, which significantly reduces LLM hallucinations. Combined with the Nvidia Nemo Retrieval QA embedding model, WeGA also reduces latencies in the RAG pipelines, enabling rapid responses. Nvidia RIVA, meanwhile, optimizes the processing of voice calls, delivering real-time transcriptions through ASR. Member interactions are facilitated by a bespoke voice, optimized for the individual member, enabled by RIVA Text to Speech (TTS). Meanwhile, the accelerated inferences provided by Nvidia Nemo Triton and TensorRT-LLM speed up the model by further reducing latencies. Apart from latency issues, ensuring safe and accurate responses from pre-trained LLM

has been a challenge. Nemo Guardrails helps block potentially inappropriate responses, significantly reducing the safety concerns. Another key aspect of this collaboration is the utilization of the Nvidia AI Enterprise platform, which encompasses generative, speech, and translation AI in healthcare solutions. This collaboration between Wipro and Nvidia aims to bring about a paradigm shift in the healthcare sector, driving innovation and productivity. By integrating advanced AI technologies into healthcare entities, the partnership is working towards optimizing operational efficiencies and transforming traditional processes. This strategic approach not only benefits healthcare providers but also positively impacts patient care and outcomes. Already, this partnership between Wipro and Nvidia has made significant advancements in applying GenAI to healthcare contact centers. With GenAI, call centers can expect key insights that enable agents to make quick and informed decisions. Members will receive quick, highquality responses and healthcare companies will achieve durable cost benefits. By leveraging the power of AI, Wipro and Nvidia are setting a new standard for efficiency and excellence in the healthcare industry, ultimately benefiting both healthcare organizations and the individuals they serve. Beyond Contact Centers: The Future of GenAI in Healthcare The joint efforts of Wipro and Nvidia will have a profound impact on member enrollment and claims adjudication processes in healthcare organizations. By automating tasks and optimizing workflows through AI integration, the partnership aims to increase operational efficiency and deliver a seamless experience for both healthcare providers and patients. Healthcare companies that adopt GenAI through this collaboration can expect to see a significant improvement in patient care quality and operational effectiveness far beyond contact centers alone. GenAI integration will not only enhances the quality of patient interactions but also ensure that healthcare companies operating under ACA, Medicare, and Medicaid can benefit from tailored AI solutions that cater to their unique needs and challenges. Meanwhile, solutions specific to contact centers will continue to improve. Wipro engineers undergoing training on Nvidia's application frameworks are committed to equipping healthcare organizations with custom AI solutions that meet their evolving needs. This investment in talent development not only enhances the capabilities of Wipro's workforce but also ensures that healthcare clients receive cutting-edge AI solutions that drive digital transformation and improve business operations within their organizations. About the Author ANINDITO DE is CTO of the AI Practice at Wipro Limited. His primary responsibilities are building capabilities across different areas of AI and ML and bringing to life AI driven intelligent solutions for customers. With over two decades of experience, he has been a part of many large technology implementations across sectors and authored multiple technology source ----- https://www.wipro.com/blogs/saji-thoppil/ ----- Contact Wipro Blogs By Author How Technology Trends are Affecting IT Infrastructure Boosting Industry 4.0 investments with 5G The Ultimate Handbook for IT Infrastructure Practitioners in 2020 Please fill the required details to access the content Saji Thoppil Saji Thoppil Wipro Fellow, Chief Technologist -Cloud and Infrastructure Services Saji drives the adoption of a range of next generation solutions under Wipro's Chief Technology Office themes that include 5G, blockchain, AR/VR, AI, and Quantum Computing. He has 25+ years of IT industry experience encompassing design, build and

operationalization of complex, distributed IT systems. Saji has created multiple practices and incubated several new IPs for Wipro. In recognition of his contribution to the organization and the industry, he was conferred the title of Wipro Fellow - Distinguished Member of Technical Staff. Emerging digital technologies such as automation, containerization, artificial intelligence, IoT, edge and ambient computing are the triggers for innovation and new business models. Expect an even more dramatic shift as 5G adoption grows, making networks more reliable and secure. Digital lies at the heart of Industry 4.0, but connectivity gives it the legs to infuse next-generation intelligence and adaptability into business systems, manufacturing plants, warehouses, and point-of-service delivery. Know the trends to follow, the investments to bet on, and the expertise to tap into.

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# The Ultimate Handbook for IT Infrastructure Practitioners in 2020

----- Arcticle source ----- https://www.wipro.com/blogs/saji-thoppil/theultimate-handbook-for-it-infrastructure-practitioners-in-2020/ ----- About the Author Contact Wipro Please fill the required details to access the content The Ultimate Handbook for IT Infrastructure Practitioners in 2020 June | 2020 Know the trends to follow, the investments to bet on, and the expertise to tap into. New capabilities and approaches in the digital age are creating new business opportunities that demand a strong technology foundation. This has brought IT infrastructure to the center stage, taking it through a most fascinating period of change. We did a global study to understand the state of IT infrastructure today, the transformative changes, and the drivers behind this change. The result is a unique, first-of-its kind report called State of IT Infrastructure 2020 that provides a comprehensive view of the shape of things to come, related to: The 130-page report is based on a survey conducted by Wipro between December 2019 and January 2020. It combines the findings and insights gleaned from the survey with our expertise accumulated over three decades from delivering IT infrastructure services and innovations to global business leaders. Our team of experts has interpreted, explained and contextualized the findings to present a neutral and unbiased representation of strategies. This is overlaid by the invaluable voice of our customers and partners who are changing the rules of the game through their IT infrastructure strategies. Respondents to the online survey included IT Managers (46%), IT Directors (33%), Senior VPs, Vice Presidents, Assistant Vice Presidents (6%) and CEOs, CIOs, CTOs and COOs (3%), and others (12%). The respondents' businesses/organizations operated in the UK (12%), North America (25%), the Asia Pacific Region (22%), in Continental Europe (17%), in the Middle East (15%), and in Latin America (9%). The respondents industries included Banking (20%), IT Services (18%), Insurance (11%), Industrial and Process Manufacturing (9%), Utilities (6%), Oil & Gas (6%), Communications (5%), Securities and Capital

markets (4%), Automotive (4%), CPG (4%) and others (13%). As the study progressed, we found that COVID-19 was adding pressure to stretch the IT infrastructure to breaking point. Many organizations that had lagged in their digital transformation programs were caught in the chaos, unable to continue to meet customer expectations—contact centers were overloaded, support tickets were growing, customers were disappointed, and employees were struggling with working from home to ensure their organizations could continue to provide services. The State of IT Infrastructure 2020 report takes a look at the impact of COVID-19 on IT infrastructure and the changes that are required to make organizations more resilient to such crises. The report concludes by looking at the barriers that could delay infrastructure transformation and provides a quick and easy-to-consume perspective specifically for Banking, Manufacturing, Consumer Services, and Energy and Utilities. Wipro's State of IT Infrastructure 2020 is the ultimate handbook for IT infrastructure experts and will serve as a friendly guide to confident decision-making right through the next 12 months. Please download your copy of State of IT infrastructure report from here Saji Thoppil Wipro Fellow, Chief Technologist - Cloud and Infrastructure Services Saji drives the adoption of a range of next generation solutions under Wipro's Chief Technology Office themes that include 5G, blockchain, AR/VR, AI, and Quantum Computing. He has 25+ years of IT industry experience encompassing design, build and operationalization of complex, distributed IT systems. Saji has created multiple practices and incubated several new IPs for Wipro. In recognition of his contribution to the organization and the industry, he was conferred the title of Wipro Fellow -Distinguished Member of Technical Staff.

## **Boosting Industry 4.0 investments** with 5G

---- Arcticle source ---- https://www.wipro.com/blogs/saji-thoppil/boostingindustry-40-investments-with-5g/ ----- About the Author Contact Wipro Related Blogs Optimizing Field services Through AR Transforming the leaveof-absence experience into an employee-retention tool A Smarter Way to Collaborate and Build Applications with Azure DevOps Please fill the required details to access the content Boosting Industry 4.0 investments with 5G September | 2020 Digital lies at the heart of Industry 4.0, but connectivity gives it the legs to infuse next-generation intelligence and adaptability into business systems, manufacturing plants, warehouses, and point-of-service delivery. Wireless connectivity plays a major role in achieving responsiveness, agility, and productivity, and the nature of wireless networks becomes even more critical as enterprise networks and infrastructure expand to encompass edge devices, sensors, wearables, drones, and mobile systems. These networks must be able to meet the exacting standards of latency, longevity, and stability that Industry 4.0 systems demand (for a practitioner's perspective on the demands NextGen infrastructure places on networks. As the new generation of communications networks like 5G Public, 5G Private, Wi-Fi 6, LiFi, and Leo satellite arrive,

they will begin to phase out the Multiprotocol Label Switching (MPLS) and point-to-point networks that businesses have invested in for decades. By looking at the new generation of communication networks, we can better understand the shape of the future: 5G Public: This is the latest cellular network protocol with advanced antenna technology. It is capable of transmission speeds of 20 Gbps with latency of 1 millisecond or less. These characteristics will lead to an explosion of real-time applications. Technologies such as Artificial Intelligence (AI), Virtual Reality (VR), and streaming services will get a major boost. GSMA reports that there will be 1.2 billion 5G connections by 2025.i 5G Private: This is expected to be the ground-breaking variant of 5G. Enterprises will use private 5G networks—if dedicated spectrum is affordable—for mission-critical applications that demand low latency and guaranteed Quality of Service (QoS). Telcos may even offer a dedicated slice of their networks that meets the requirements of enterprises. The good news is that Private 5G is becoming available in many parts of the world, including the U.S., Europe, China, and Japan. However, we have yet to see how public and private 5G networks will evolve, compete, and collaborate. Wi-Fi 6: This is the latest version of Wi-Fi and is faster than 802.11ac. Wi-Fi 6 provides improved performance in device-filled homes and offices. As an example, if a location is using a Wi-Fi router with a single device, speeds increase by 40% with Wi-Fi 6 when compared to Wi-Fi 5. In addition, Wi-Fi 6 communicates to multiple devices at the same time, instead of broadcasting to one device and then the next. It also uses a new technology called "target wake time" that reduces the drain on batteries in devices. This is particularly important because battery life is a major determinant of cost as well as performance for mobile devices. LiFi: This is a type of WiFi that's about 100 times faster. LiFi uses LED bulbs to pulse light - like Morse code, except that the human eye cannot detect it - in order to transmits data. Transmission speeds can exceed more 100 Gbps. LiFi works within a range of about 10 meters and cannot pass through walls (automatically making it secure). LiFi could become a key source of connectivity in aviation, healthcare, education, retail, and homes. Leo Satellite: Low Earth Orbit or LEO satellites provide global wireless coverage, across the most difficult types of terrain (mountains and oceans) that other networks cannot cover. Most communication satellites are in LEO, allowing real-time communication. Selecting the most suitable wireless network for Industry 4.0 initiatives will depend on the demands of instance, latency, reliability, security, and throughput that are derived by the applications. Cloud office networks will be among the early beneficiaries of 5G. This network will be able to handle the increased amount of nodes that are connected with 10 times less latency and 100 times faster speeds, delivering exceptional user experience and business efficiency. Users will be able to switch between their Wi-Fi networks and 5G seamlessly using OpenRoaming (which is currently in beta). This functionality will open the door to wider networks, encompassing Wi-Fi, cellular, and possibly LiFi at some point. 5G is set to accelerate Multi Edge Computing (MEC) by providing new functionalities that enable edge computing. Open Radio Access Network (O-RAN) deployed over 5G will propel applications like autonomous vehicles and the IoT, while new edge platforms like EdgeX Foundry for IoT and Intel Openness will use 5G to create new services and use cases. For the next few months, as organizations ponder over their approach to 5G and its role in realizing their Industry 4.0 ambitions, they

will do better by familiarizing themselves with: MEC Applications: Multi-Access Edge Computing (MEC) shifts computing from a centralized cloud to the edge of the network, moving it closer to the customer. The edge network analyzes, processes, and stores the data instead of sending all of it to the cloud. O-RAN: This is a vendor-neutral disaggregation of Radio Access Network (RAN) at the hardware and software levels on general purpose processor-based platforms. It implements an open interface between components (such as RU/CU/DU) using hardware and software-defined functions. This will help drive innovation across an interoperable multivendor landscape. IoT and Gateways: The IoT gateway is a key element in an IoT ecosystem. It is the bridge for communications, connecting Zigbee sensors with the Internet, Bluetooth devices with native cloud applications, and more. It also reduces latency—a key requirement for IoT—and improves capacity at the edge by pre-processing raw information. Edge Platforms: Edge platforms can be used to run applications and bring processing closer to the customer/end user. Examples of Edge platforms include Edgex Foundry and Intel OpenNESS. 5G LAN: 5G LAN (Local Area Network) is among the most promising technologies on the horizon. It can be used to build an on-campus cloud office network without the need for the enterprise to build a network (thus saving on network construction and maintenance costs). OpenRoaming: OpenRoaming is a new method to automatically and securely connect mobile devices to trusted Wi-Fi networks. It doesn't require the use of passwords or personal details. Users can effortlessly switch between 5G networks and Wi-Fi (the Wi-Fi location needs to be a participant in the 5G provider's network). Secure Access Service Edge (SASE): SASE (pronounced "sassy") is an emerging cybersecurity concept that allows organizations to apply secure access, regardless of where their users, applications, or devices are located. Fundamentally, it makes security management on 5G simple and stress free. The implications of these technologies are self-evident. Combined with 5G, they will play a major role in boosting the potential of Industry 4.0 investments. By injecting higher levels of speed, convenience, performance, security, and efficiency, they will create differentiators for business. Ultimately, the race to lay the groundwork for 5G integration will truly accelerate once organizations realize the impact it can have on customers, partners, and employees. References i https://www.gsma.com/futurenetworks/ip services/ understanding-5g/5g-innovation/ Industry: Saji Thoppil Wipro Fellow, Chief Technologist - Cloud and Infrastructure Services Saji drives the adoption of a range of next generation solutions under Wipro's Chief Technology Office themes that include 5G, blockchain, AR/VR, AI, and Quantum Computing. He has 25+ years of IT industry experience encompassing design, build and operationalization of complex, distributed IT systems. Saji has created multiple practices and incubated several new IPs for Wipro. In recognition of his contribution to the organization and the industry, he was conferred the title of Wipro Fellow - Distinguished Member of Technical Staff. In the evolving landscape of digital workplaces, efficient field service operations are critical in ensuring reduced downtime... appy employees usually stay at their jobs, frustrated workers often don't. Chief human resource officers (CHROs) tell us that the corporate leave of absence (LOA) process is one of the most common sources of employee frustration. Employees often rank their LOA experiences low on the satisfaction scale, using descriptors such as complicated, confusing, inconsistent, time consuming, and unresolved. In

a world where business is evolving at the speed of thought, rapidly changing market conditions pose several challenges for enterprises across industries.

### How Technology Trends are Affecting IT Infrastructure

----- Arcticle source ----- https://www.wipro.com/blogs/saji-thoppil/howtechnology-trends-are-affecting-it-infrastructure/ ---- About the Author Contact Wipro Please fill the required details to access the content How Technology Trends are Affecting IT Infrastructure December | 2020 Emerging digital technologies such as automation, containerization, artificial intelligence, IoT, edge and ambient computing are the triggers for innovation and new business models. Expect an even more dramatic shift as 5G adoption grows, making networks more reliable and secure. When deployed in the right combinations, these technologies have the power to enhance capacity and reduce maintenance and operating costs. The underlying implication of this goes beyond enabling people and processes with technology. IT infrastructure has a new role to play in improving user experience, supporting organizational goals, meeting regulatory requirements, and extracting value from investments that can go straight to the bottom line. Technologies such as hybrid cloud, IoT and edge computing will change IT infrastructure provisioning and management. The collection and analysis of real-time data using IoT, for example, will ensure that just the right maintenance is undertaken at the right time and organizations have constant insight into the remain value of their assets. Over the next two or three years, a vast amount of enterprise infrastructure will be deployed at the edge. By some estimates, about 50% of new infrastructure will be at the edge. Much of this will have processing capability. Disasters like COVID-19 have helped to hasten the cycles of adoption for edge infrastructure. Sensors at the edge—say in automobiles, oil rig equipment, farm equipment, manufacturing equipment, utility meters, cobots, scanners, headsets, wearables—will drive the rise of next-generation IT assets. However, the truth is that most organizations are unprepared—or cannot fully leverage these digital technologies. To prepare, modernization of the underlying infrastructure is an urgent need. There are two emerging challenges this shift in IT will bring: While the benefits of a digital-ready infrastructure are understood, many organizations cannot keep pace with the change. We wanted to know what impedes progress despite the availability of technology and the demands placed by a digital-native workforce. For this, we conducted a global cross-industry survey. Our survey revealed that the lack of an overall digital strategy (64%) and the cost of transformation (64%) were the biggest barriers. Organizational structures and legacy partners (58%) were also hindrances but these will probably reduce rapidly as the promise of digitalization turns into visible reality across industry ecosystems. Saji Thoppil Wipro Fellow, Chief Technologist -Cloud and Infrastructure Services Saji drives the adoption of a range of next generation solutions under Wipro's Chief Technology Office themes that include 5G, blockchain, AR/VR, AI, and Quantum Computing. He has 25+

years of IT industry experience encompassing design, build and operationalization of complex, distributed IT systems. Saji has created multiple practices and incubated several new IPs for Wipro. In recognition of his contribution to the organization and the industry, he was conferred the title of Wipro Fellow - Distinguished Member of Technical Staff. www.wipro.com/blogs/mohan-bhatia/ ---- Contact Wipro Blogs By Author How Banks are using emerging technologies to modernize Data Infrastructure Banks are embedding intelligence into data infrastructure Banks need to modernize their data infrastructure Please fill the required details to access the content Mohan Bhatia Mohan Bhatia Wipro Fellow, Distinguished Member of Technical Staff Mohan has more than 20 years of industry experience across risk and compliance domain, including defining policies, processes, TOMs, and technology systems. A Digital and Cloud Strategy and Business Model Expert, Mohan has also authored guite a few internationally published books. He is a Fellow at Distinguished Member of Technical Staff (DMTS), Wipro. He has been an Invited expert at Gyan Sangam - Conference of 150 CEOs of Banks and Financial Institutions and top management of RBI - By Ministry of Finance Government of India - 2015 and 2016. His fourth book Bank 4.0: Future of Banking Technology is under publication by Springer. To cope with the disruption in their business models, banks need to manage high data volumes, including managing unstructured data, in real time. Banking technologies are undergoing a major shift as banking companies face the challenge of servicing digital native customers with real-time service requirements supporting voice and text conversations and with low data latency to support marketplace and regulatory requirements. With the advent of digital native customers, banks are facing a paradigm shift in their customer behavior.

## Banks need to modernize their data infrastructure

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modernization 2. Leveraging emerging technology in data infrastructure modernization 3. Embedding intelligence into data infrastructure at banks 4. Addressing key challenges of data modernization projects Data modernization is a long journey. The journey needs to be supported by redefining business architecture, technology architecture and people skills or the target-operating model of the bank. Since the changes may take 2-5 years to start showing business benefits, bank managers need to communicate and win trust of the board of directors of the bank to get requisite budget, support and guidance. Adapting an anchor standard like BIAN service model may also help. Need and purpose of data infrastructure modernization: Banks are facing disruption in their business model from all side- from changing customer expectations, from regulators, from industry and competition and from fintechs and new players. The question which every bank has to ask is whether, their existing systems with completely varying data definition and formats, with data quality and reconciliation managed manually by large teams of analysts, fragmented applications and integrations, monolithic applications, rudimentary and underdeveloped systems to handle unstructured data be able to cope with the surging market demand. Banks need to build a roadmap for modernization of their technology to cope with the threat to their business model. Let us also keep in mind that banks are very different from any other industry. Why? The most relevant attribute here is the volume. Which other industry will have the following volumes in transactions and analytics? o Assets Size of the Bank - USD 50 Bn to USD 1500 Bn o Transaction per day - 2Million -50Million o Customer Base 3Million - 400Million o Concurrent Users for Analytics - 1000-3000 o Analytics jobs to be executed daily 20000 to 40000 o Uptime for Analytical Infrastructure 99.5% to 99.9% o Uptime for OLTP and Product Processors - 99.999% to 99.9999% To quote Einstein, "We cannot solve our problems with the same thinking we used when we created the problem." So, existing technology infrastructure cannot solve the daunting problem of paradigm shift in the customer profile, cost structure and compliance requirements. Banks need to exploit emerging technologies that have matured during the past four years at a very fast pace. In the next blog, we will discuss how emerging technology is being leveraged by banks to modernize data infrastructure. Industry: Mohan Bhatia Wipro Fellow, Distinguished Member of Technical Staff Mohan has more than 20 years of industry experience across risk and compliance domain, including defining policies, processes, TOMs, and technology systems. A Digital and Cloud Strategy and Business Model Expert, Mohan has also authored quite a few internationally published books. He is a Fellow at Distinguished Member of Technical Staff (DMTS), Wipro. He has been an Invited expert at Gyan Sangam - Conference of 150 CEOs of Banks and Financial Institutions and top management of RBI - By Ministry of Finance Government of India - 2015 and 2016. His fourth book Bank 4.0: Future of Banking Technology is under publication by Springer. Digitalization and Cloudification are vital to business success and not an option any more. The Telco industry is one of the first to adopt newer technologies. Performance and scalability of IT systems have always been the key non-functional requirements that are used to gauge the production-readiness of any implementation project. Do you know what end-point protection tools are running on your desktop or laptop? If not, you can hover your mouse over at the quick access task bar and see icon descriptions. ==============

## Banks are embedding intelligence into data infrastructure

----- Arcticle source ----- https://www.wipro.com/blogs/mohan-bhatia/banksare-embedding-intelligence-into-data-infrastructure/ ---- About the Author Contact Wipro Related Blogs Connectivity and Interoperability: Realizing the Full Potential of Comprehensive IoT Solutions Is Salesforce Right for My Nonprofit Organization? Beyond the Pandemic: Key Priorities for Agility and Growth Please fill the required details to access the content Banks are embedding intelligence into data infrastructure December | 2019 Banking technologies are undergoing a major shift as banking companies face the challenge of servicing digital native customers with real-time service requirements supporting voice and text conversations and with low data latency to support marketplace and regulatory requirements. Banks can prepare themselves to support such a paradigm shift in servicing requirements by embedding their data infrastructure with intelligence. Unless intelligence is contextualized for a bank and built into every component of the data infrastructure, the embedded intelligence does not create the intended beneficial impact. Data infrastructure can be divided into four components: data preparation and integration, data storage and data warehouse, analytics and visualization Data. This blog discusses how intelligence and analytics can be embedded into every component of data infrastructure to enable banks to reduce latency. Business intelligence is not a naïve term in the banking domain. A cohesion of smart tools and techniques create business intelligent solutions that are increasingly being adopted by banks. This makes the process seamless, convenient for customers and ensures precision in business outcomes. 1. Intelligent data preparation and integration Banks are focusing on making data preparation and integration intelligent right from data ingestion to data preparation. They are being embedded with visual exploration for generating exception, analytics and insights on integration, the end objective is to facilitate accurate results. The other function that banks are looking to implement is to enable visual based data discovery in terms of geo-spatial capabilities and create empowered business users. On the other hand, automated data governance capabilities supported by data quality, meta data, data custodian, data definition and semantic definitions, traceability, privacy, custody, and metadata are also being developed to enhance the overall offerings for customers. 2. Efficient data storage and warehouse Do banks have processes in place that ensures that the huge data available to them can be trusted? For this, data storage and data warehouse plays a key role. A storehouse of data is essential to eliminate operational challenges. It is, therefore, essential for banks to extend the logical data warehouse to no SQL data, data in other formats, offloading computation and storage to public or private or hybrid cloud. Additionally, banks should also look at having an 'In-memory columnar engine' for faster and better performance. That in turn will support interactive and visual applications, multiple data sources, complex data models and complex calculations. 3. Augment data analytics and visualisation In today's data driven world, it is critical for

banks to adopt tools that will help analyze, process and evaluate data to generate strategic business outcomes. Customers and businesses need clear information to operate in an intelligent manner. That is why enhancing the analytics and visualisation with linguistic computing capabilities is essential for banking processes. Banks can even adopt Natural Language Processing (NLP) and Geo spatial intelligence to augment analytics. NLP is a simple way to raise a query on data and generate narratives to explain drivers and graphs, making the entire process clear and transparent. Voice and search based interface for raising a query on data is another way to enhance the data and analytics capabilities. For a more engaging platform, banks could even weigh conversational analytics that in the form of chatbots and virtual assistants help in driving precision in the operational workflow. Conclusion: Technology has matured, yet the banking industry has miles to go: Augmented Analytics and the entire intelligence built so far only augments the technology capabilities. It lacks domain content. It misses the domain data model and domain specific measures, correlations, clustering, links and narrations. As usual, this is still not augmented with the knowledge of: The differentiating mark of a successful FinTech is it builds the domain knowledge into the technology. Success is directly proportional to the quality of depth of domain knowledge built. Example can be embedded geospatial data of the area where bank provides ATMs- so that longitudinal and latitudinal information is mapped to the physical address- the entire conversion has to be in-built. Some banks are using the generic intelligent capabilities provided by Google, AWS, Azure and Facebook. Unless, banks build subject matter depth, adoption of technology like conversational UI will be limited. This includes banking terms, banking products, banking product computation, banking intents, banking sentences etc. We need to keep in mind that subject matter expertise of Bots works both way. Depth in expertise grows and shortfall reduces the adoption exponentially. Embedding intelligence into data infrastructure projects should not be treated like a software project but should rather be treated as a business model disruption project and be given the necessary investment, effort and attention. In the next blog we will discuss challenges a bank faces if they manage intelligence projects as software projects. Industry: Mohan Bhatia Wipro Fellow, Distinguished Member of Technical Staff Mohan has more than 20 years of industry experience across risk and compliance domain, including defining policies, processes, TOMs, and technology systems. A Digital and Cloud Strategy and Business Model Expert, Mohan has also authored guite a few internationally published books. He is a Fellow at Distinguished Member of Technical Staff (DMTS), Wipro. He has been an invited expert at Gyan Sangam - Conference of 150 CEOs of Banks and Financial Institutions and top management of RBI - By Ministry of Finance Government of India - 2015 and 2016. His fourth book Bank 4.0: Future of Banking Technology is under publication by Springer. To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. Salesforce offers an incredible range of functionalities, making it difficult to find.... A report from Forrester predicts up to 20% of Fortune 500 companies will not make it through 2021 intact. "[For] some, their assets will be dissolved or purchased; others will just go out of business." One possible cause of this is a lack of strategy when investing in and utilizing technology. "The pandemic revealed the flaws in many companies' technology...and their tech leaders were found mired in

# How Banks are using emerging technologies to modernize Data Infrastructure

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multi-definition, low latency data requirements. Yes, banks need to build predictive capabilities to manage the large data volumes, and that is why banks are investing in data science to generate better returns, propel customer engagement and adhere to compliance guidelines. The industry is on a roll. Managing cost The consistent problem with banks is to manage costs effectively. Surviving competition and rendering optimum customer value at the same time is a key challenge that banks face. In such a scenario, to garner savings and optimize costs, banks are leveraging data lakes on commodity hardware/appliance with open-source software. They are also streamlining the decision on data management by helping existing data warehouse to offload storage and computation to cloud. In a separate attempt, within cloud, they are dividing the load between archival storage vs daily use data as well. Building flexible and configurable technology Flexible data integration and data preparation capabilities leveraging big data and data lakes are helping banks to create visible and intelligent transformation. This helps in creating the traceability needed for privacy regulations like CCPA and GDPR and BCBS 239 and can also help in replacing monolithic ETLs with data streaming and API integration capabilities to support Open APIs and marketplace. The regulatory hunger for data has grown 10X in the past 10 years or so and this is clearly likely to grow by another 10X in upcoming five years. Therefore, banks are building microservices-based risk, finance and regulatory infrastructure to address the upcoming changes. They are also embedding intelligence and flexibility into their data infrastructure to make the overall operational processes seamless and convenient for customers. At the end of the day, customer is the king. Conclusion The use of emerging technologies by banks is enabling the twin objectives of configurable intelligent technology to handle large business volume in a very cost efficient way- a must to support disruption in existing business models. Industry: Mohan Bhatia Wipro Fellow, Distinguished Member of Technical Staff Mohan has more than 20 years of industry experience across risk and compliance domain, including defining policies, processes, TOMs, and technology systems. A Digital and Cloud Strategy and Business Model Expert, Mohan has also authored guite a few internationally published books. He is a Fellow at Distinguished Member of Technical Staff (DMTS), Wipro. He has been an Invited expert at Gyan Sangam - Conference of 150 CEOs of Banks and Financial Institutions and top management of RBI - By Ministry of Finance Government of India - 2015 and 2016. His fourth book Bank 4.0: Future of Banking Technology is under publication by Springer To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. Salesforce offers an incredible range of functionalities, making it difficult to find.... A report from Forrester predicts up to 20% of Fortune 500 companies will not make it through 2021 intact. "[For] some, their assets will be dissolved or purchased; others will just go out of business." One possible cause of this is a lack of strategy when investing in and utilizing technology. "The pandemic revealed the flaws in many companies' technology...and their tech leaders were found mired in Band-Aids like tech modernization, 

### Rituparna Ghosh

----- Arcticle source ----- https://www.wipro.com/blogs/rituparna-ghosh/ -----Author's Posts Contact Wipro Please fill the required details to access the content Rituparna Ghosh General Manager, Head - Continuous Improvement With over 16 years of experience, Rituparna (Ritu) Ghosh, is a General Manager with Wipro. In her 13 years with Wipro, she has held multiple roles? both internal and customer facing. She currently heads the Continuous Improvement initiatives in Wipro. As a part of this, she leads the Lean, Six Sigma and Agile transformation initiatives across the organization. Ritu has been responsible for the re-launch of Lean, Six Sigma and Agile. She designed and implemented a bottom-up strategy, based on continuous improvement to drive a cultural change within the organization and deliver measurable benefit to the projects. She and her team works closely with accounts to drive Agile transformation and works closely with various functions like CHRD, Training to drive the organizational change around Agile. Ritu is an MBA in Marketing and Strategy with graduation in Economics. She is a certified Black Belt in DMAIC and trained in Lean, CMM?, CMMI?, ITIL? and Agile. Ritu previously held a business role in Wipro and was responsible for driving the Process consulting business with a team of 550+ consultants. She has several white papers in her name which have been published in industry bodies like SEI and ANO.

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### **How Happy is Your Developer?**

----- Arcticle source ----- https://www.wipro.com/blogs/rituparna-ghosh/howhappy-is-your-developer/ ---- About The Author Related Articles Contact Wipro Please fill the required details to access the content How Happy is Your Developer? November | 2022 As enterprises have invested in new developer-oriented technologies, tools, products and solutions, the development process itself has become more difficult to navigate. Advanced security measures, for example, have resulted in increasing process controls, counteracting the overall trend toward fast, agile and iterative engineering. Meanwhile, the imperative to be agile and iterative has itself created new challenges for developers. Developers today do not just code. They have to Shift Left and adopt modern engineering practices, and also understand what the client wants, which means building a UX skillset to match the software engineering skillset. They need to not only test the code they write, but also release it and subsequently monitor its performance. Developers end up spending more time navigating complex systems and processes, and less time doing the actual engineering that ultimately adds value. They face an engineering ecosystem requiring significant environment setup time, a pronounced lack of standardization, manual workflows, long test cycles and feedback loops, and high wait times. These factors result in poor developer experience that leads to lower engineering efficiency, increased re-work, reduced innovation and ultimately higher employee churn and lower customer satisfaction. Developer sentiment, in

other words, is intimately connected to core business outcomes. Developer Experience: The Key to Developer Happiness Amid all of these emerging challenges, a focus on developer experience is becoming a business imperative. A developer experience strategy examines how each developer touchpoint in the value delivery lifecycle can be made more smooth, effortless and seamless. It aims to ensure that a developer has a positive experience while interacting with the organization, its tools and its systems. Developer experience is rooted in several factors, including: Today's most talented developers are seeking the freedom to focus on building great features, products and applications. They want a seamless, frictionless enterprise ecosystem of tools and systems that provides continuous datadriven feedback. They also want to be part of a vibrant engineering community that shares deep knowledge about best practices, approved solutions and re-useable code snippets to accelerate productivity. Most importantly, they seek an environment defined by a "safe to fail" mindset that encourages rather than disincentivizes experimentation and bold innovation. A robust investment in developer experience can turn those aspirations into a day-to-day reality. Mapping the Developer Journey To understand an organization's current developer experience status, the starting point is to meticulously map out a typical day in the life of a developer. Immediately, numerous moments of non-value-additive work will begin to reveal themselves. Developers find themselves asking for more context in the face of unclear requirements. They wait for an engineering environment to be created so that they can begin actual development work. Before they can hand the code over to the release team, they wait again for code validation to complete. Based on the findings of the Developer Journey mapping exercise (as seen in Figure 1), engineering leaders can begin to institute solutions. They can deploy requirement analysis bots, automate engineering environment setup, and improve validation with faster code analysis technologies. While cultural shifts and management practices have a large role to play in improving developer experience, many experience improvement interventions are technology interventions (see Figure 2)—low hanging fruit and can be harvested with a platform. A Platform-Centric Approach to Improving Developer Experience While a developer journey mapping exercise can identify gaps and define opportunities for improvement, a Developer Experience Platform (DXP) allows organizations to permanently reshape the entire developer experience. A well-designed DXP can reduce non-value-additive developer work time by 25 to 30%. Organizations that decide to adopt a DXP often struggle with whether to build a solution or buy one off the shelf. Often, the most efficient and adaptable answer is to acquire a base platform and then build organizationspecific customizations on top of it, in consultation with internal SMEs and/ or external specialists. To build or customize a DXP to deliver maximum business value, a design thinking approach can lay out a comprehensive path for real-world improvements in developer experience. A design thinking approach (see Figure 3) assesses and solves for the gaps identified during developer journey mapping and builds the solutions into a unified DXP system. Through a collaborative diverge-converge-diverge-converge approach, a design thinking model takes into account all developer roles and personas and ensures that an organization not only incorporates the right things in the platform but designs the various features with end users in mind. Building the Developer Experience Platform Once gaps and

opportunities have been identified through the mapping journey and design thinking, the resulting DXP should be built to operate on four distinct levels (Figure 4). While this layered approach might seem complicated, the objective is to create a radically simple (yet comprehensive) experience layer. The experience layer provides developers with everything they need in their day-to-day work: one-click solutions, intuitive navigation and search functions that allow them to easily locate relevant best practice documentation and essential tools and systems, and guick access to reuseable code. Colloquially speaking, with a DXP, developers get to drive the car without having to worry about the engine under the hood. Once established, Development Experience Platforms are often supported by a centralized platform team. However, to maintain a focus on continuous improvement, DXP management should be democratized as much as possible, creating opportunities for the user community to drive further platform development. In Conclusion According to a recent McKinsey report, a positive developer experience significantly impacts developer velocity, and developer velocity has a profound effect on business outcomes. Organizations with exceptionally strong Developer Velocity Index scores drive revenue growth at a pace that is more than 4 times faster than companies with lower DVI scores. A well-designed DXP system will inevitably translate continuous improvement on the engineering side into measurable business impacts. Projects will be completed on time and within budget, customer satisfaction will increase, and a stronger and better aligned engineering team will drive a stronger and better aligned business. Rituparna Ghosh Vice President, Global Head of Agile and DevSecOps Wipro FullStride Cloud Services An experienced and dedicated "agilist," Ritu drives new ways of working that catalyze digital transformation. She enables teams to respond to paradigm shifts by calibrating their existing systems, processes and tools to adapt to a changing world. Prior to her current role, Ritu headed the continuous improvement initiatives in Wipro, including Lean, Six Sigma and Agile transformation initiatives. She is a certified Black Belt in DMAIC and trained in Lean, CMM®, CMMI®, ITIL® and Agile. www.wipro.com/blogs/srini-pallia/ ---- Contact Wipro Blogs By Author The Metaverse Has Arrived, and Its Implications Will Shape Our Not-Too-Distant Future 3 Keys to Hitting Your Net-Zero Goals Post-Pandemic Growth in the US Will Be Digital-First and Cloud-Led At Davos 2021, A Call for Better Business Stay-on-course, Augment or Pivot? - A Model for the New Normal What Does It Mean to Be an Essential Business? Disruption management and COVID-19 Going Beyond Scale - Innovation via M&As in the Retail and CPG Industry Emerging Economies and the New Consumption Mindset Please fill the required details to access the content Srini Pallia Srini Pallia Chief Executive Officer - Americas 1 Srini Pallia is the Chief Executive Officer for Americas 1 and member of the Wipro Executive Board. In this role, Srini leads a wide range of industry sectors and is responsible for establishing their vision, as well as shaping and implementing growth strategies. Srini joined Wipro in 1992. Over the years, he has held many leadership positions, including President of Wipro's Consumer Business Unit and Global head of Business Application Services. Throughout his tenure, Srini has strengthened Wipro's business performance, and continues to accelerate growth. Named one of India's top 25 young business executives by Business Today (2008), Srini holds a bachelor's degree in engineering,

and a master's in management studies from Indian Institute of Science, Bangalore. He graduated from Harvard Business School's Leading Global Businesses executive program, and the Advanced Leadership Program at McGill Executive Institute. Srini is also a member of Wipro's Group Executive Council and Inclusion & Diversity Council. The metaverse is here and with its fully immersive and augmented virtual experiences far superior to anything we have witnessed before, the boundaries between our physical and digital worlds may gradually collapse for good. If we hope to truly make a difference in climate change, we need to step up and lead as global organizations dedicated to completing the most critical mission of our collective existence. Here are a few places to start. The United States federal government has been in overdrive as of late More than the Swiss town experience of Davos, with its beautiful promenade and picturesque snowscape, what I find most charming about the World Economic Forum (WEF) is the opportunity it presents to mingle with impressive people from fields completely outside my own. Last month, one of the largest retailers in the US announced two new experiences to help families make memories together. The first promised a free virtual camp that brings summer fun directly to customers' backyards, and the second was a touring drive-in movie theatre that will transform their store parking lots into outdoor cinemas. Essentially, retailers are trying to reimagine large empty spaces for shoppers. As the COVID-19 crisis set in, lockdowns set in as well, and businesses started closing. However, some of those businesses just could not stop due to their criticality when it comes to serving the communities they operate in. In fact, the more dire a society's situation, the more necessary these "always-on" businesses become. Although most people hadn't given much thought in the past to what makes a business "essential," it has now become much clearer. With COVID-19 (Coronavirus variant) spreading over 70 countries and infecting around 100,000 people (3000+ deaths), the World Health Organization (WHO) has formally declared it as a pandemic. In the last few years, there has been a spree of acquisitions in the retail and consumer goods industry, with about a 45% rise among the top 50 consumer goods companies worldwide. The smartphone or tablet you're reading this blog on was, in all likelihood, assembled in an emerging market economy.

### **Emerging Economies and the New**

### **Consumption Mindset**

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economy. The hot tea you're sipping could very well have been grown in Sri Lanka or China. The shoes you're wearing were probably manufactured in either Vietnam or Turkey. Observing people and lifestyles around us, it is impossible to ignore the pervasive role that emerging economies have played as producers in the global business environment. However, as momentum slows down in the developed markets, multinationals are looking at emerging economies as markets with high potential consumers who will power the next wave of growth. The Millennial Impact Emerging markets are fast growing economies undergoing rapid change with an expanding middle class. These are home to about 86% of the world's millennials, with almost half of them of working age. China and India together account for over 400 million of this demographic. Emerging economies have been acting as global growth drivers and their share is expected to go up from 40% of the world GDP today to 55% by 2020. Millennials are driving more consumption and demanding better services owing to disruptive advancements in mobility and connectivity. Consumption habits and spending patterns for this demographic are redefining consumer journeys, thus necessitating more touch-points and greater availability. Today, consumer segments like entertainment, apparel & accessories, health & beauty as well as food services are particularly expected to bring profits to the market driven by millennials of such economies - these sectors are going to benefit more from the shift in demographics2 Experience & Product Innovations These factors have led to channel proliferation & digitization driven by technology-enabled online consumption. Millennials in emerging markets are also looking for a personalized "anytime-anywhere" experience like their counterparts in developed economies. The key difference in consumer classes of the emerging economies is their exposure and awareness of global brands coupled with significant "brand recall and appeal factor". Organizations in emerging economies are in turn trying to ride this newfound wave by launching fresh brands and categories, providing transparency in product information and personalizing experience across channels. Process model innovation in the e-commerce space complemented by friendly return policies and last-mile delivery options have made it easy for consumers to get a "touch and feel" and even a "try and buy" product experience. For e.g., the luxury goods industry in India has already started the use of AI-based chat-bot solutions to engage better with millennial shoppers and provide a personalized experience. Digital Payments Revolution Diverse consumption channels have also led to the advent of digital payment solutions in emerging markets. These markets are making focused efforts to introduce and promote retail e-payment devices with governments setting up systems to enable centralized fund transfer. Mobile payments, e-wallets and one-click payments have gained huge traction with consumers. They are revamping their systems to manage retail e-payments to bring in newer and innovative systems. Digital payment solutions have also been used by government bodies and agencies to credit aid and benefits to citizens directly. This has improved the effectiveness of public service programs and reduced leakages in public spending. The Bolsa Familia Programme (BFP), is one of the largest ongoing conditional cash programs through Citizen cards issued by the Brazilian government owned savings bank. In its first year alone, it benefitted about 11 million underprivileged families and its coverage was approximately 100% of impoverished Brazilians, which comprised about 25% of the nation's population3. The

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payments market in China is booming as well with banks in China reporting
25.71 billion transactions in 2016, up almost 85% from 20151. This is
expected to grow at 68% annually for the next two years. In 2013, the Indian
government launched the Direct Benefit Transfer program which comprises
439 schemes to transfer subsidies to citizens through their bank accounts.
Total transactions in the year 2018 were more than 282 Crore with a total
value of about Rs.2,69,778 Crores4. With the dramatic growth of digitization
and internet penetration, it is imperative for consumer markets to shift from
traditional to modern retail channels including e-commerce. Personalized
experience, custom or tailor-made offerings, innovative payment methods
etc. are crucial distinguishing factors preferred by millennials. Digital
platforms (enabled by AI and machine learning) are fast re-engineering
industry processes and impacting entire ecosystems. Consumers are now
able to have more visibility into the entire value-chain and authenticate
products and geographic origin. Smart payment systems now enable faster
transactions and hence have a positive impact on overall consumption. The
convergence of a cashless economy fuelled by millennials demanding high
levels of experience and convenience would be where multinationals can tap
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4. https://dbtbharat.gov.in/ Industry : Srini Pallia Srini is President and
Global Head of Wipro's Consumer Business Unit which serves customers in
a range of consumer-focused industries including Retail, CPG, New Age,
Media, Entertainment, Travel, Transportation, Hospitality and Public Sector.
He is responsible for setting the vision as well as shaping and implementing
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Srini has been with Wipro for over 28 years in various leadership roles -
establishing, scaling and spearheading growth across Business Units,
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As the retail sector continues to adapt and evolve to a post-pandemic
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# Going Beyond Scale - Innovation via M&As in the Retail and CPG Industry

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bid high. The best performing companies use booms to accumulate cash and pay down debts. They then acquire in slower times when the prices are at fire-sale levels. If companies have cleared their debt during boom season, they can have the borrowing capacity during more sluggish guarterly cycles. In short, M&As in CPG will continue to be driven by the priorities of revenue growth via new customers/new products coupled with profitability via operational excellence. Let's look at some recent examples from the industry: Proximity to consumers and expanded geographies - Offerings like meal kits service are relatively new categories that are challenging well established restaurants and grocery chains. For Food & Beverage majors, this is an opportunity to get close to new sets of consumers as well as tap into a new buying behavior within their traditional consumer base. Unilever is backing San Francisco based startup Sun Basket, a subscription-based meal delivery service provider. Walmart acquiring Flipkart for \$ 16bn was the biggest deal of 2018. This acquisition helped the company to jump headlong into a small but fast growing e-commerce market with about 100 million active customers. The industry is optimistic of M&A activity reigniting growth among the consumer and retail market leaders. While legacy players will continue to have a sharp eye on top-line growth, it is important to balance short-term revenue targets and long-term strategic shifts. Newer innovative start-ups and domain players will continue to disrupt the retail and CPG space by foraying into agile marketing techniques to improve consumer journeys and broaden their consumer interfaces. Thus, the choice for the old guard is to drive growth by aggressively pursuing innovative companies that have mastered different consumer segments, adopt new-age go-to-market strategies, new technologies or brands and use their existing scale and reach as a force multiplier. References https:// www.forbes.com/sites/billconerly/2018/06/10/now-is-not-the-time-for-ma/ #8824f8c711d7 https://assets.kpmg/content/dam/kpmg/xx/pdf/2019/03/ consumer-and-retail-m-and-a-trends-2019.pdf https://www.atkearney.com/ retail/consumer-retail-ma-report https://www.bbc.com/news/world-asiaindia-44064337 https://www.retaildive.com/news/7-retailers-that-madepivotal-deals-in-2018/541107/ https://www2.deloitte.com/us/en/insights/ industry/retail-distribution/global-ma-trends-consumer-products-growth.html Industry: Srini Pallia Srini is President and Global Head of Wipro's Consumer Business Unit which serves customers in a range of consumerfocused industries including Retail, CPG, New Age, Media, Entertainment, Travel, Transportation, Hospitality and Public Sector. He is responsible for setting the vision as well as shaping and implementing growth strategies for each of these industry verticals. He is a member of Wipro's Group Executive Council & Wipro's Inclusion and Diversity Council. Srini has been with Wipro for over 28 years in various leadership roles - establishing, scaling and spearheading growth across Business Units, Service Lines and Markets. In his previous role Srini was Sr. Vice President and Global Head of Business Application Services, and prior to that he was Vice President and head for Enterprise Business in North America. He was rated among the top 25 Young Business Executives in India by Business Today in 2008. He has received several accolades for his contributions to Wipro's growth and customer success. Srini holds a Master's degree in Management Studies from Indian Institute of Science, Bangalore and a Bachelor's degree in Engineering. He has undergone Leading Global Business Executive program from Harvard Business School and an Advanced Leadership Program from

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www.wipro.com/blogs/srini-pallia/disruption-management-and-covid-19/ -----About the Author Contact Wipro Related Blogs Why Transitioning to a Direct-to-Consumer Model (D2C) is a Winning Proposition for CPG Companies Driving Supply Chain Resiliency with Industry 4.0 Selling consumer products in the time of COVID-19: 3 Digital transformation tips to succeed Please fill the required details to access the content Disruption management and COVID-19 April | 2020 COVID-19 has officially been declared a pandemic, creating serious side effects as it has shut down industries and disrupted global supply chains. While everyone's top priority is to stop the spread of the virus, this moment in time represents the chance to evaluate current supply chains and determine where to invest in new processes and technologies that can help mitigate the most serious disruptions. This might seem counterproductive given the economic signs that indicate the economy is heading into a recession; in the long-term, however, supply chains must be made more durable. With emerging technologies such as 3D printing, blockchain, IoT, and automation, companies can build more resilient supply chains that can diminish the threat of black swan events such as the COVID-19 pandemic. They can also provide additional benefits such as safer work environments and lower operating costs. Here are three lessons learned that can help supply chain managers reduce risk in the future. 3D Printing Means Less Reliance on Single-Source Components Factories shutting down due to COVID-19 creates a huge problem for companies that rely on several single sources of crucial components. Similar events occurred in 2011 as a result of the Japanese tsunami: Companies were stuck as they could no longer get specialized components created by individual vendors. Although convincing vendors to move away from the business model might be difficult, companies can instead focus on building those specialized components in-house using 3D printing. This technology is often viewed as a gimmick, good only for creating figurines or other minor items for consumers. On an industrial scale, it has the potential to be revolutionary. It requires more focus on developing the right software and materials science to accelerate this transformation, but it has the potential to eliminate the logistical issues surrounding availability, obsolete design, and elusive specialized components. In the event of a disruption, components built in-house increases the durability of the supply chain. A single 3D printed item will cost the same as bulk manufactured 3D products, meaning there's no need to reach a certain threshold to save costs. This also lowers costs that can be passed on to customers and make a company more competitive. The IoT Reduces Needs for Potential Contamination Health officials have warned that COVID-19 can remain on surfaces for several days. This turns typical supply chain tasks that require manual human inspection into opportunities to spread infection. The Internet of Things (IoT) can help reduce these tasks by using sensor data to automatically collect information and give workers the information they need without the risk of spreading contamination. For example, in fleet management, IoT sensors provide the ability to monitor the

workforce, fleet locations, and conditions in real time. This automates some reporting and inspection processes — improving operational efficiency, reducing costs, controlling asset damage, reducing damage claims, and meeting regulatory reporting requirements, and significantly improving customer satisfaction. Additionally, when transferring goods from freight to a factory, workers won't need to manually check if all cargo is offloaded or if the correct components (and correct number of those components) are delivered when machines can automatically relay that information. Automation and Robotics Also Reduces Infection Opportunities Although white-collar professionals have the chance to work from home during a pandemic, there aren't similar opportunities for workers within the supply chain who are responsible for ensuring the physical transfer of goods. However, that doesn't mean they have to be at risk of spreading infection. Companies should audit the technology investments in infrastructure to understand what can be automated and where robots can be utilized to minimize human contact for a contagion scenario. For example, autonomous vehicles and drones could be a replacement to humans in last-mile delivery, which puts both consumers and delivery workers at risk of spreading infection. Automation is also helpful on the warehousing front, as there are already entire warehouses where only robots roam. Of course, not every task can be performed by a robot, so companies will need to invest in cobot (collaborative robot) solutions where a human works mainly with a robot to accomplish nuanced tasks outside their capabilities. These scenarios are easier to deploy than pure robotics and require less "rip and replace" for existing infrastructure. An Opportunity for Discovery As businesses adjust to a new but temporary reality of a COVID-19 world, they're learning several lessons to use once the crisis subsides. Companies are discovering that workers needn't always be in the office to be the most efficient teleconferences can be just as valuable as face-to-face meetings. Likewise, supply chain managers have the opportunity to determine how to best upgrade processes and technologies so they too can realize new benefits. For more information or to talk with our experts about how we can help you reduce supply chain risks, click here to request a meeting. Industry: Srini Pallia President, Consumer Business Unit, Wipro Limited Srini is President and Global Head of Wipro's Consumer Business Unit which serves customers in a range of consumer-focused industries including Retail, CPG, New Age, Media, Entertainment, Travel, Transportation, Hospitality and Public Sector. He is responsible for setting the vision as well as shaping and implementing growth strategies for each of these industry verticals. He is a member of Wipro's Group Executive Council & Wipro's Inclusion and Diversity Council. Srini has been with Wipro for over 28 years in various leadership roles - establishing, scaling and spearheading growth across Business Units, Service Lines and Markets. In his previous role Srini was Sr. Vice President and Global Head of Business Application Services, and prior to that he was Vice President and head for Enterprise Business in North America. He was rated among the top 25 Young Business Executives in India by Business Today in 2008. He has received several accolades for his contributions to Wipro's growth and customer success. Srini holds a Master's degree in Management Studies from Indian Institute of Science, Bangalore and a Bachelor's degree in Engineering. He has undergone Leading Global Business Executive program from Harvard Business School and an Advanced Leadership Program from McGill Executive Institute. The

#### What Does It Mean to Be an Essential Business?

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to insure provision to consumers of essentials. How has your company diversified, reframed or transformed its products and services portfolio to stay relevant in the crisis? Becoming an Essential Business Essential businesses have a duty to be operational and available, even to be able to expand suddenly during emergencies such as the COVID-19 pandemic. However, what does it mean to be an essential business? In what ways should businesses operate differently than other companies to become essential to customers and consumers? Becoming essential starts with a mindset shift. Businesses must ask themselves: "How can we re-align our priorities and help sustain society?" "What is the nature of our relationships with governments, especially local governments?" "Are we prepared to work in tandem with them if necessary, in a crisis?" "Are we certain we can operate 24×7, if we have to?" Remember, being essential is a privilege and not a profiteering opportunity. However, if you can shift the way your stakeholders view how you operate and what your priorities are, you can unquestionably enhance your long-term corporate value without sacrificing financial metrics. This is a time to focus ever more intently on customer satisfaction while considering the full range of stakeholders, including employees and the public or community interest. Leverage technology Essential businesses, more than all others, need to ensure business continuity by carefully leveraging technology. Since business processes today invariably run on digital technologies, ensuring service quality levels, customer satisfaction, and system availability become table stakes for an essential business. Without a strong IT foundation, a company cannot fulfill its responsibility to function as an essential resource. This starts with a winning user experience that includes intuitive navigation and feedback while also taking care of accessibility and availability. Be transparent In times like these, operating ethically and transparently is more important than ever. Your external stakeholders will be able to sense your level of integrity, and if you pass the test, the long-term benefits will be great. Internal transparency and maintaining open channels of communication boost employee morale, motivation, and trust. Prepare for innovation Every crisis brings opportunities. This crisis has accelerated the technological development of many regions and cities as it became obvious that innovative solutions were needed during the crisis to cater to the needs of the people. Many organizations are offering innovative solutions that cater to health concerns. Retailers are offering curb-side pick-up. Logistics companies are doing temperature checks for delivery personnel. Airlines are eliminating middle-seat passengers. Bike-sharing firms are frequently sanitizing their bikes. Such steps may appear marginal now, but we will see a lot more innovation around "contactless commerce" in the future. Denmark, for example, is deploying UVD robots in hospitals, government buildings and airports to provide relief to overworked healthcare teams and workers. We can expect more drones, robots, and automation in a wide range of business operations, especially in areas with direct consumer interaction. Take care of your employees Another critical area is employee safety. Essential companies must always consider the risks, sometimes enormous, that their employees face. Providing a safe working environment is part of being essential, which means abiding by regulations or going beyond them. Traditionally high-touch occupations like retail store associates, delivery personnel, warehouse operators and factory workers need to

be provided with clear standard operating procedures around safety equipment, sanitation and personal space. Rethink customer value With the economy close to a standstill and many people experiencing a sudden loss of income, people are dramatically more conscious about what they spend their money on. Thinking about that and what it means will be hugely valuable for companies providing essential services today as well as companies that restart operations when the lockdown eases. Products taken for granted in normal times suddenly become a luxury during a crisis. A perfect example is how we feel when supermarkets run out of toilet paper or milk. In a crisis, consumers quickly shift what they consider valuable. Buying behaviors change, from pursuing wants to satisfying basic needs. In recent times cleanliness, sanitization, and social distancing have taken priority over everything else. Many of these shifts are permanent, especially concerns about health and safety. Be agile This unprecedented situation has taught businesses that they must be ready to transform their products and services quickly to serve society. Businesses have realized the importance of being agile, nimble, and open-minded about transforming their core business. Many global corporations are now prepared to redesign their supply chain and manufacturing operations in case of another emergency like this. Retailers have started to transform their stores in preparation of future needs. A Last Word on Staying Essential As a Wiproite, I'm particularly proud of the fact that Wipro and the Azim Premji Foundation committed USD 154 million toward a COVID-19 response. The contributions by the Wipro family have reached 7.8 million people. That includes 270 million meals, and 200,000 PPE kits and N95 masks. We were able to contribute COVID-19 relief in Maharashtra, the worst affected state in India. Under an MoU with the government of Maharashtra, we have also turned one of our facilities in Pune, Maharashtra, India, into a 450-bed COVID-19 hospital as part of relief efforts. Our sister concern, Wipro Enterprise Limited, has begun manufacturing hand sanitizers, ventilators (using 3D printing technology), and robot assistants. I find the sense of responsibility and seriousness spreading throughout the world gratifying. I am certain many businesses have learned during this time that it is not the products or services which give the profits. It is rather successfully serving needs of customers and consumers. At the core of it is empathy to customers' fears, concerns, changed priorities and needs. If your organization can respond to this, it will surely adapt and stay essential, through this pandemic and beyond. Industry: Srini Pallia President and Global Head of Wipro's Consumer Business Unit Srini Pallia is President and Global Head of Wipro's Consumer Business Unit which serves customers in a range of consumer-focused industries including Retail, CPG, New Age, Media, Entertainment, Travel, Transportation, Hospitality and Public Sector. He is responsible for setting the vision as well as shaping and implementing growth strategies for each of these industry verticals. He is a member of Wipro's Group Executive Council & Wipro's Inclusion and Diversity Council. Srini has been with Wipro for over 28 years in various leadership roles - establishing, scaling and spearheading growth across Business Units, Service Lines and Markets. In his previous role Srini was Sr. Vice President and Global Head of Business Application Services, and prior to that he was Vice President and head for Enterprise Business in North America. He was rated among the top 25 Young Business Executives in India by Business Today in 2008. He has received several accolades for his

## Stay-on-course, Augment or Pivot? - A Model for the New Normal

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or services (Media, Telecom, Utilities, Banking). We now see product companies using services as a sweetener (like free delivery or warranty) and services companies offering products as a differentiator. Many organizations have undertaken initiatives to shore up revenues via new product categories (the surge in apparel companies like Hanes1 and Levi's2 making facemasks and PPE, for example). Others have offered experiences to bring customers back to their premises or just generate brand recall, like the case of drive-in movies in retail premises. Are there any takeaways from these innovations? Are these stories replicable regardless of the type of business one is in, the country of operations, scale, and customers served? Organizations that have employees who are ready to be multi-skilled and business functions (sales, supply chain, manufacturing) that are agile and flexible have been able to swiftly augment their offerings (look no further than Pepsi launching snacks.com in four weeks flat) and even completely pivot (hotels being transformed into hospitals). For firms worldwide, it is time to reassess their capabilities and identify what can be leveraged to not just grow revenues, but reshape their brand promise as well. References: 1. https:// www.hanes.com/

maskn2.html#:~:text=Hanes%20face%20masks%20are%20here,Comfort%E2%84%A2 2. https://www.companynewshq.com/company-news/fashion-company-news/ introducing-reusable-levis-masks-levi-strauss-co/ Industry: Srini Pallia Chief Executive Officer - Americas 1 Srini Pallia is the Chief Executive Officer for Americas 1 and member of the Wipro Executive Board. In this role, Srini leads a wide range of industry sectors and is responsible for establishing their vision, as well as shaping and implementing growth strategies. Srini joined Wipro in 1992. Over the years, he has held many leadership positions, including President of Wipro's Consumer Business Unit and Global head of Business Application Services. Throughout his tenure, Srini has strengthened Wipro's business performance, and continues to accelerate growth. Named one of India's top 25 young business executives by Business Today (2008), Srini holds a bachelor's degree in engineering, and a master's in management studies from Indian Institute of Science, Bangalore. He graduated from Harvard Business School's Leading Global Businesses executive program, and the Advanced Leadership Program at McGill Executive Institute. Srini is also a member of Wipro's Group Executive Council and Inclusion & Diversity Council. The consumer packaged goods (CPG) industry was badly affected by the pandemic, much like several other industries. Organizations in this industry therefore relied on retail In 2020, the pandemic rattled global supply chains As the retail sector continues to adapt and evolve to a post-pandemic environment \_\_\_\_\_

## At Davos 2021, A Call for Better Business

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Davos, with its beautiful promenade and picturesque snowscape, what I find most charming about the World Economic Forum (WEF) is the opportunity it presents to mingle with impressive people from fields completely outside my own. There is an energy at Davos that these impromptu conversations capture. I always leave feeling inspired and eager to apply what I've just learned When I heard that Davos would be digital this year, I wondered, what will a digital Davos look like? It will be less serendipitous, for sure: no unexpected run-ins with global leaders and change-makers, no guick meetand-greets or catching up over coffee. But these are unusual times, and adapt we must. So, this year, amidst virtual sessions and meetings, some recorded, some live, I hope you will all join me in looking for ways to recreate that energy of Davos, and share new ideas for each other to try. One idea I've been interested in is the concept of better business, which is one of the seven themes for Davos 2021. When the pandemic halted economies in 2020, it forced a kind of global reset. Organizations adopted new ways of working. Consumer behaviors suddenly changed. And a powerful question emerged: How can we move beyond unbridled consumerism to promote compassionate, sustainable capitalism? Better business stems from this question, building on the idea of stakeholders beyond shareholders with an all-inclusive approach that prioritizes employees, communities and the planet. Central to this effort is rebuilding trust. Faith in institutions is at a low point right now. People are questioning the veracity of everything from breaking news and history to vaccines and masks. Business leaders need to regain the trust of the general population by modeling behaviors of good corporate citizenship. This means truly listening to the needs of the people and committing to behaviors that will address those needs, now and down the line: inclusion and diversity in the workforce; enriching the communities in which businesses operate; promoting sustainable environmental, labor, and economic practices. Commitment is the key word here: Better business is not a one-time push. It's an ongoing effort, but the payoff for those who make that commitment is bound to be substantial. Here at Wipro, our commitment to sustainability from the way we use our resources to the way we build and run our organization — has earned us a place in the Dow Jones Sustainability Index(DJSI) for eleven consecutive years. For the past nine years, we've been recognized as one of the most ethical companies in the world because of our focus on corporate ethics and our commitment to integrity in business. Led by our founder-chairman, two-thirds (67%) of Wipro's economic interest is pledged to charitable causes in education and community-building, making us arguably the most giving organization in the world. We've been building our habits for years. What does better business mean for you, your customers, your community? How are you and your colleagues adapting to meet this moment? I look forward to hearing your ideas for the future, and hope you'll join me in making 'better business' the new normal. Srini Pallia Chief Executive Officer - Americas 1 Srini Pallia is the Chief Executive Officer for Americas 1 and member of the Wipro Executive Board. In this role, Srini leads a wide range of industry sectors and is responsible for establishing their vision, as well as shaping and implementing growth strategies. Srini joined Wipro in 1992. Over the years, he has held many leadership positions, including President of Wipro's Consumer Business Unit and Global head of Business Application Services. Throughout his tenure, Srini has strengthened Wipro's business

## Post-Pandemic Growth in the US Will Be Digital-First and Cloud-Led

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support via phone and online. As supply of specific necessities and durable goods ran out at various times (sanitizers, toilet paper, even exercise machines), CPG companies questioned the resilience of their supply chains and were forced to evaluate the possibility of local manufacturing, reshoring, and near-shoring. As prediction models fell by the wayside and direct-to-consumer sales surged, demand planning and allocation became key differentiators with heavy scrutiny of last-mile capabilities. Another industry that bucked trends from before the pandemic is the health and medical insurance industry, the second largest sector in US after retirement and pension plans. While unemployment rates grew during the peak of the pandemic, so did enrollment in Medicare and Medicaid (6.7% in 2020 and 4.1% in 2021). Adoption of telemedicine also increased significantly, "from 11% in 2019 to 46%" according to a McKinsey survey, to replace in-person healthcare visits. "Providers have rapidly scaled offerings and are seeing 50 to 175 times the number of patients via telehealth than they did before." As consumers were confined at home with more time than ever before to watch content, the media and entertainment (M&E) industry fared well with many more consumers switching to online streaming services. However, drop-off rates were predictably volatile considering the economic uncertainties subscribers were dealing with. Tailoring plans, offering flexible or tiered models, increasing support for multiple devices: Solutions like these might help keep customers from switching services. Another interesting trend in M&E has been the blurring of content categories. What makes a program a music concert, a reality television show, an interactive game or a talk show? Today we often see multiple elements come together to make programs more socially engaging. This is making it difficult to classify a program under a single genre or category. As 5G gains momentum, enterprises will need to tailor separate strategies for consumers and the business to provide hyper-personalized experiences and drive loyalty. To better understand consumers, shoppers, patients, subscribers, businesses must intensify their applications of advanced analytics to design products and services that help align consumer preferences with purchasing behavior. This would mean mapping consumer data across multiple parameters like consumption patterns, product and service or channel and delivery preferences, local demand surges; weather patterns, local/state/national regulations, and competition data. 5G can be the high-speed pipe which streams multimedia data to give businesses real-time insights into consumers interactions and locations, including homes. This would enable retail, CPG, and healthcare providers to gain direct insights into what offerings are being received well, how and where are they consumed, and how to proactively prevent drop offs. In the post-pandemic world, hyper-personalization will be key, and businesses will need to have offers and promotions that are in sync with consumers' behaviors and preferences. What role would technology play? At a foundational level, organizations would need to overhaul their technology capabilities to match business expectations. This could mean XaaS (everything-as-a-service) on cloud, IoT/edge computing coupled with AI/ machine learning for autonomous supply chains and virtualized IT operations. New-age tech would work with service design elements in a design-of-experiments mode to make innovation continuous. Potential benefits would include both increased revenues and lower costs. In health, for example, this would mean improved convenience and access to care, better patient outcomes, and a more efficient healthcare system. From an

organizational standpoint, the people angle would extend to workforce capabilities. Frontline workers would have the exact same or better information than consumers have in their devices, while insights from the front-end would need to be fed back all the way to new product or process design. Finally, behavioral patterns and shifts are not static, necessitating the need to have a constant mechanism to monitor and respond to changes. Coming out of the pandemic, the US economy is slated to cross the 6% mark in terms of GDP growth after decades of flattish growth. Sectors and organizations that are truly local will need to quickly invest in digital transformation to be among the beneficiaries. Industry: Srini Pallia Chief Executive Officer - Americas 1 Srini Pallia is the Chief Executive Officer for Americas 1 and member of the Wipro Executive Board. In this role, Srini leads a wide range of industry sectors and is responsible for establishing their vision, as well as shaping and implementing growth strategies. Srini joined Wipro in 1992. Over the years, he has held many leadership positions, including President of Wipro's Consumer Business Unit and Global head of Business Application Services. Throughout his tenure, Srini has strengthened Wipro's business performance, and continues to accelerate growth. Named one of India's top 25 young business executives by Business Today (2008), Srini holds a bachelor's degree in engineering, and a master's in management studies from Indian Institute of Science, Bangalore. He graduated from Harvard Business School's Leading Global Businesses executive program, and the Advanced Leadership Program at McGill Executive Institute. Srini is also a member of Wipro's Group Executive Council and Inclusion & Diversity Council. The consumer packaged goods (CPG) industry was badly affected by the pandemic, much like several other industries. Organizations in this industry therefore relied on retail In 2020, the pandemic rattled global supply chains As the retail sector continues to adapt and evolve to a post-pandemic environment

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## 3 Keys to Hitting Your Net-Zero Goals

---- Arcticle source ---- https://www.wipro.com/blogs/srini-pallia/3-keys-to-hitting-your-net-zero-goals/ ---- About The Author Contact Wipro Related Blogs The Retail Revolution: What should retailers focus on? Please fill the required details to access the content 3 Keys to Hitting Your Net-Zero Goals November | 2021 The reduction of greenhouse gases has become a critical target for businesses around the world, and the way forward is through assessment, measurement and the transformation of operations. Many organizations have set aggressive net-zero goals in recent months, some shooting to cut their emissions 50% by 2030 and some going for net-zero by 2040 or 2050. Wipro has set 2040 as the year it intends to reach net-zero greenhouse gas emissions, and Ford Motor Co. aims to achieve global carbon neutrality by 2050. Though 21% of the world's largest 2,000 public companies now have net-zero commitments, this is only a small fraction of the world's overall population starting the race to end global warming. In reality, it will require a much larger majority to slow the effects.

Sustainability in business has gone from an interesting differentiator in product marketing to a core dimension, with many elements measured in a system of people, product, profit and planet. It now provides a competitive edge, and sustainability is now demanded by customers, observed by shareholders and regulated by legislators — all evaluating businesses on their authenticity in helping slow climate change (versus greenwashing to check the box and throw the ball in anyone else's court). The Great Beyond To become truly sustainable, organizations will need to try much harder and envision radical change across the spectrum, from sourcing and product development to distribution and supply chain to product life cycle, recovery, recycling, remaking and responsible end of life. It is a requirement of producers to honestly assess their environmental impact, create a strategic plan to transform operations, and measure and report on outcomes—beyond sales and beyond profit. Success can and should be measured in purposeful ways. One is the creation of honestly sustainable products and services based on maximizing circularity. Product life extensions with designed abilities to upgrade, managed by superior customer service programs, go a long way in building brand loyalty and influence. Measurable cost reductions by digitization, transparency and simplification in the supply chain, lowering energy usage, reducing packaging and shipping impacts, and eliminating all forms of greenhouse gas emissions are key drivers for both the bottom line and for demonstrating sustainable operations to environmentally conscious consumers. The ambition and complexity of a revolution in go-to-market processes, transformation of the value chain, and end-of-product-life impacts cannot freeze us. We must start from somewhere. It's never been more important to outline and set pragmatic steps to change behaviors all along the spectrum—from producers, suppliers and distributors to consumers and waste managers. Prioritizing Sustainability Now If we hope to truly make a difference in climate change, we need to step up and lead as global organizations dedicated to completing the most critical mission of our collective existence. Here are a few places to start: 1. Stand up a framework for data democratization, measurement and reporting. Organizations that endeavor to reach a state of sustainable operations will need to understand their environmental impact across their entire value chain. To understand footprint and impact, they must start with understanding and unifying data, which requires a digital services platform that allows open data formats and data democratization. Developing accurate data sources and aggregating them at the right levels of insights are two of the hardest pieces of the sustainability endeavor. Timely ingestion of accurate emissions, energy consumed, and waste data into a modern sustainability reporting framework is a requisite digital service. Organizations should prioritize the implementation of renewable energy-powered clouds that allow granular power management through automation. Also, the selection of open, flexible and composable systems and partnerships are key to fast and simple pivots in response to rapid innovations. 2. Develop an assessment of current impact across the entire value chain. Organizations need to invest in digital services focused on sustainability efforts to understand climate risk resulting from operational outputs. In addition to reporting feeds, the use of advanced prediction services that combine and fuse data from satellites, drones, and weather patterns can add another powerful layer of intelligence to consider economic shifts and geopolitical risks. Then develop a mitigation strategy to address pollution spikes across the entire value chain. 3. Set netzero targets and develop a transformation plan. A modern sustainability reporting framework will allow the organization to ingest internal and external data, plus understand the impact of activities at the workflow levels and their latent impact. This can be materialized using tools like predictive machine learning, zero-carbon cloud services, visualization tools and dashboards, and data democratization. Ultimately, the greenhouse gas reduction targets will be based on findings from current operations and must be discussed with executives' teams for consensus and alignment. Development of a transformation plan will require understanding the current footprint, setting sustainability targets and embracing digital enablers. Leadership should make sustainability a key transformation enabler rather than a compliance and reporting cog. This requires hiring leadership that understands sustainability, and there should be sufficient financial enablers and non-financial enablers to invest in sustainability innovations. C-suite and the board must be well-informed of the targets and transformation plan relative to growth and profitability. True alignment requires balancing internal goals, external success measures and environmental impact. Executives must believe in and mandate sustainability from beginning to end. This effort must become part of the organizational ethos. Lastly, organizations need to hire leaders who have sufficient experience in and understand the decarbonization cycle and its economics. Many leaders who have held roles in ESG and corporate responsibility have experience orchestrating the many components of the sustainability mission. This article is originally published on: https:// chiefexecutive.net/3-keys-to-hitting-your-net-zero-goals/ Industry: Srini Pallia Chief Executive Officer - Americas 1 Srini Pallia is the Chief Executive Officer for Americas 1 and member of the Wipro Executive Board. In this role, Srini leads a wide range of industry sectors and is responsible for establishing their vision, as well as shaping and implementing growth strategies. Srini joined Wipro in 1992. Over the years, he has held many leadership positions, including President of Wipro's Consumer Business Unit and Global head of Business Application Services. Throughout his tenure, Srini has strengthened Wipro's business performance, and continues to accelerate growth. Named one of India's top 25 young business executives by Business Today (2008), Srini holds a bachelor's degree in engineering, and a master's in management studies from Indian Institute of Science, Bangalore. He graduated from Harvard Business School's Leading Global Businesses executive program, and the Advanced Leadership Program at McGill Executive Institute. Srini is also a member of Wipro's Group Executive Council and Inclusion & Diversity Council. On August 3, we hosted a panel discussion with Avasant Principle Shirin Alipanah, Wipro VP and Global Head Deviprasad Rambhatla, Bumble Bee Foods CIO Tony Costa, and Columbia Sportswear & Avasant Distinguished Fellow Fred Pond.

#### The Metaverse Has Arrived, and Its Implications Will Shape Our Not-Too-Distant Future

----- Arcticle source ----- https://www.wipro.com/blogs/srini-pallia/themetaverse-has-arrived-its-implications-will-shape-our-not-too-distant-future/ ---- About the Author Contact Wipro Related Blogs How to Transform from Problem Solving to Customer Success 3 ways Servitization can change the game for high tech players Is your business transformation agenda covering these six key areas? Please fill the required details to access the content The Metaverse Has Arrived, and Its Implications Will Shape Our Not-Too-Distant Future January | 2023 The metaverse is here and with its fully immersive and augmented virtual experiences far superior to anything we have witnessed before, the boundaries between our physical and digital worlds may gradually collapse for good. It is the most-debated topic in technology and manifests itself in different ways to different groups of people, from being a digital playground for interaction to being a platform that can change the way we do business and engage with stakeholders. Wipro's interest in the metaverse is centered around creating enormous economic value for our clients by being early adopters of this disruptive technology and shaping its future. We are helping enterprises look at the metaverse through two specific lenses — as a platform for creating experiences unlike any other, and as a new business opportunity and revenue stream that did not exist before. In fact, in a recent study we conducted with our top 520 clients across industries in the U.S. and Europe, more than half of executives said they believe that in 10 years' time, the metaverse will be viewed as the next generation of the Internet.1 Further, 80 percent agreed that the metaverse will enhance business operations by making them more immersive, and 60 percent said it's a game changer that will profoundly transform business. 1 While the concept and related technology of the metaverse continues to evolve, we believe it's critical for businesses of all sizes and industries to begin looking at the potential of the Metaverse and exploring its applications to their unique environments. We are helping early adopters and leaders get started in their journey while encouraging others to realize the potential and move quickly in this direction. One thing true across industries, is that the journey of adopting the Metaverse starts with a good use case that is core to the business. It involves design thinking to reimagine experiences and potential revenue models. Let's look at some industry sectors and horizontal use cases where the Metaverse is making an impact. Entertainment and Consumer Industries: As we all know the gaming and entertainment industry has been at the forefront of the metaverse revolution. Interactive movies and storytelling are emerging themes that are gaining traction. Virtual concerts and events with audiences of several thousand participants closely resemble real life concerts and events. Metaverse tourism and sports industries are also taking shape. Even casinos are looking to launch experiences in the metaverse. Virtual stores another reality. A metaverse could be used to create virtual representations of physical stores, allowing customers to browse and shop in a fully immersive online environment, moving retailers to the edge of what is

possible by allowing consumers to lead, design, interact, and engage the way they want with brands. The possibilities of personalization are endless and would be key in driving consumer adoption of the technology. Luxurv brands like Gucci are experimenting with this concept, launching an interactive art- and fashion-inspired virtual world called the Gucci Garden where visitors can buy virtual clothing with their traditional currency. The metaverse could be used to allow customers to virtually try on clothes, makeup and other products, helping them to make more informed purchasing decisions. Companies like Peloton are designing the new world of immersive fitness experiences by leveraging the metaverse to create a unique value to motivate consumers to buy and — more importantly continue using their products. This could easily pave the way to newer revenue streams of subscription models and fitness-as-a-service. Imagine Peloton charging for exclusive experiences like cycling on the Great Wall of China, for example. Manufacturing In the manufacturing industry, organizations will be able to set up twin supply chains to assess the operational execution of X model versus Y model. The cost of a mistake in manufacturing is significantly higher than any other industry; however, if you can analyze variables in two operational models via digital twinning, you're able to create dynamic new cost architectures, job training and learning opportunities for specific job functions in real time. Healthcare The metaverse can provide added benefits in healthcare delivery, patient engagement and remote health. It offers a range of options to make healthcare more efficient, accessible and effective. The metaverse can help improve the efficiencies of clinical trials and research; improve learning and development in medical schools; and improve the quality of testing in pharmaceutical manufacturing and supply chains. Digital twin models can be leveraged to train doctors and nurses on post-care and emergency services by simulating physical environments where they can delve into immersive learning sessions with specialists. Metaverse adoption in clinical trial journeys will also enhance the patient and caregiver experience. Augmented reality and virtual reality have been used for various physiotherapies and mental-health treatments like loneliness. Cross-Industry Use Cases Learning and Development: Enterprises adopted VR for learning functions several years back, targeting on-the-job skills training, dangerous environment safety simulations and expensive machinery maintenance. The metaverse can take it to the next level by bringing in leadership and soft skills development through the infusion of immersive learning for inculcating behavioral skills where traditional in-person learning sessions were not viable. Immersive learning can be valuable for enabling diversity and inclusion in training, interviewing, etc., where potential employees need to operate in virtual/hybrid work environments. Immersive 3D content and virtual simulation of behavioral traits with role-playing avatars will have a profound learning impact, especially for the digital-native Gen Z crowd. Collaboration and Innovation Imagine product design, testing and manufacturing in an immersive and digital environment to help companies iron out production issues in the physical realm. The bottom-line efficiencies that result will have far-reaching impacts on costs. Sustainability Sustainability is a tricky conversation when spoken with respect to the metaverse today. On the one hand, the reduction in carbon emissions due to moving from physical to virtual products and environments stands to be immense. The simple action of performing a single Ethereum transaction

consumes 60% more energy than 100,000 credit-card transactions (Bitcoin consumes 14 times more energy). However, these companies realize that they need to be more sustainable. Ethereum has changed its fundamental verification process recently, reducing emissions by 99.992%. Overcoming Adoption Challenges While the metaverse brings about many innovations for good, several challenges need to be addressed to enable mainstream adoption and acceptance. Some potential pitfalls of the metaverse include: Reputation, Identity and Asset Ownership: Proof of trust and legitimacy requires new verification methods for decentralised identity management. Instituting security best practices for open identity management is a key success factor to ensure strong metaverse governance protocols are in place. Within the creator economy — where users participate as "value exchanger" or "value creator" — the recommended approach is to verify that the creation of digital assets brought into the metaverse are from a trusted source. Personal Data and Security: The metaverse creates a virtual environment where users' actions and interactions can be monitored and tracked. This raises concerns about privacy and the potential for personal data to be accessed or misused. Transforming from centralised data management to decentralised identities requires a sound strategy for protecting personal data and assets. Accessibility and Equity issues: There may be equity issues related to access to the metaverse, as not all individuals may have the necessary technology or financial resources to participate in virtual environments. Law and Jurisdiction: The metaverse is a relatively new development, and there may be legal and regulatory issues that need to be addressed as it becomes more widespread (i.e. GDPR), with increased attention to open identity management recommendations. Strategies for Adoption Through our experiences and working with clients, we at Wipro have developed a model for successful adoption of the metaverse journey which includes: 1. Identify suitable use cases for metaverse journey with underlying business drivers and success criteria. 2. Set up your experience lab to quickly innovate and scale across enterprise and discover ways to monetize it. Create a library of assets, solutions and platforms to help get to where you need to go faster. 3. Incorporate strategic design, which has the fundamental capacity to change the way people live, work and play in the metaverse. Design capability should be at the intersection of strategy, design, marketing and technology. 4. Leverage ecosystem for innovation by creating cross-functional teams to help innovate from beginning to end — including business consulting, technology and security, design and data. Pair this action with a deep-partner ecosystem to enable innovation at scale. The transition to the metaverse will also require a workforce skilled on these technologies and newer programming paradigms, such as designing and building virtual and augmented experiences, spatial computing, and decentralized transactions. We are also building out our very own metaverse for employees - new joinees to have a differentiated experience as well as to be a Learning and development platform to upskill. References 1. To understand the full potential of emergent Metaverse platform - its applications, challenges, risks, and opportunities - Wipro surveyed 550 business and technology executives across the US, UK, and Germany. Read the newly launched full report here: The Industrial Metaverse: A Revolutionary Game Changer for Business. Srini Pallia CEO Americas, Wipro Srini Pallia is the CEO for Americas 1 and member of the Wipro Executive Board. In this role, Srini

leads a wide range of industry sectors and is responsible for establishing their vision, as well as shaping and implementing growth strategies. Srini joined Wipro in 1992. Over the years, he has held many leadership positions, including President of Wipro's Consumer Business Unit and Global head of Business Application Services. Throughout his tenure, Srini has strengthened Wipro's business performance, and continues to accelerate growth. Named one of India's top 25 young business executives by Business Today (2008), Srini holds a bachelor's degree in engineering, and a master's in management studies from Indian Institute of Science, Bangalore. He graduated from Harvard Business School's Leading Global Businesses executive program, and the Advanced Leadership Program at McGill Executive Institute. Srini is also a member of Wipro's Group Executive Council and Inclusion & Diversity Council. For many decades, the mission of tech support has been helping customers deal with a variety of issues covering the typical lifecycle of a software product. Support has been an essential part of selling and servicing software throughout the history of commercial computing. Subscribing to products as a service helps customers get more bang for their buck As hi-tech business models morph to accommodate new digital channels, new revenue streams, recurring revenue opportunities, and go-to-market strategies, companies need to be conscious of change across the 6 key dimensions as well.

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#### **Jayant Prabhu**

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#### business value from data

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wrong. It isn't easy going for Chief Data Officers (CDO) and Chief Analytics Officers (CAO). The tools and technologies around data (image recognition, automation, artificial intelligence, stream analytics, machine learning, data visualization, etc.) are not just difficult to harness, but in the wrong hands, they often throw up frustratingly irrational results. In addition, there are the challenges of trying to figure out where to apply data sciences. Should it be to projects that improve customer experience, that create new learning or improve existing processes? Should it be to projects that add to revenue, improve market share or reduce costs? Prioritizing the goals of data analytics can become confusing. Without adequate guidance, enterprise can quickly go down the wrong path with investments, time and resources. Finally, once you've mastered the technology and clarified the business goals, there remains the business of actual data collection. Organizations have been collecting data for ages. Now they have even more options, ranging from their own data stores and customer interactions to data hunters, brokers, aggregators, public databases, syndication services and very sophisticated data ecosystems. The data supply side is exploding. It is a problem of plenty. To further complicate matters, this is a fast changing area of technology, forcing most organizations to acquire the types of data that their existing tools and skill sets can manage. Senior executives will readily acknowledge that this is a problem. They must still rely on gut feel and personal judgment. This is not altogether bad. If anything, an experienced and confident executive who is driven by instinct is an asset. It is even better when the executive is right most of the time. But the fact remains that this kind of business instinct needs to be institutionalized if it is to scale across the organization and if it is to survive the executive--which brings us back to the problem of data collection, acquisition and quantifying its benefits. This leads us to the four key issues that enterprises must keep in mind when dealing with data to generate business insights: These appear to be simple goals. However, CDOs and CAOs will readily agree that this is not the case. With very little time to ramp up data and analytical capabilities within the enterprise before competition gets there, CDOs and CAOs would do well to team up with reliable data consultants. It's the painless—and effective—path to building a strong data driven organization. Check out this webinar to understand how your organizations can take confident and sure steps to a data-driven future. Industry: Jayant Prabhu Global Head and VP. Data. Analytics & AI, Wipro With a passion for driving data to decisions journey for Wipro's customers, Jayant has played multiple roles within Wipro in the area of Data, Analytics & AI. He has spent 22 years with Wipro and is a part of the Wipro DMTS (Distinguished Member of Technical Staff) Council. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the 

#### Uncovered! The path

#### to an intelligent enterprise

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What is the right data for you? What do you pay for the data? How do you manage it? How do you apply the correct algorithms and analytical techniques for optimal results? How do you scale processes for the evergrowing demand by employees for intelligent decision-making? These questions around data are becoming the roadblock to creating intelligent enterprises. According to Forrester Research, 62% of high growth firms are using consultants and insights providers to overcome the challenges around creating the intelligent enterprise. Consultants are necessary. They know how to squeeze every ounce of value out of your data. In addition, they are equipped to orchestrate the complete lifecycle of data and analytics projects. This means you don't miss opportunities that are hidden in your data. And more importantly, you avoid the pitfalls that such complex projects are vulnerable to and which can spell the difference between long-term success and failure. Check out this webinar to understand how industry leaders are leveraging data and analytical consultants. Industry: Jayant Prabhu Global Head and VP, Data, Analytics & AI, Wipro With a passion for driving data to decisions journey for Wipro's customers, Jayant has played multiple roles within Wipro in the area of Data, Analytics & AI. Having spent 22 years with Wipro, he is a strong pillar of Wipro DMTS (Distinguished Member of Technical Staff) Council. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. ===============

#### **Proactive Pandemic Strategies**

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more customers become proactive in leveraging Data, Analytics and AI to build the capabilities they'll need in the years ahead. The path forward is to reassess, respond, and recalibrate REASSESS Better decisions begin with better questions. Is your organization prepared to make the correct decisions in this fast-changing crisis and beyond? Are you able generate fast, reliable insights from enterprise-wide and external data sources to make confident choices? Building an Intelligent Enterprise will be critical in the future. Some organizations are already on the path, others are just beginning their journey. But regardless of the stage of maturity, now is the time to accelerate your efforts. Look for quick wins that drive cost savings and efficiency. REASSESS IN ACTION An insights-driven, automated contact tracing solution for an energy provider to minimize the health risk of its field employees. By leveraging Wipro's operating analytics solution on its existing enterprise data infrastructure, the solution was up and running to help leaders make critical business decisions in less than two weeks. RESPOND In the face of uncertainty, some executives can find themselves frozen, fearful of making a wrong move that will make a bad situation worse. Others can leap from one decision to the next, hoping to find an outcome that works. Responsiveness requires agility built on solid data, clear processes, and scenario modelled planning that enables more trustworthy forecasting. RESPOND IN ACTION Business users at a global technology major wanted to make faster decisions even in the face of uncertainty and frequently changing business plans. Wipro helped them build agile and real-time planning and forecasting processes. Scalable, customizable, and platform agnostic with KPI transparency across business functions, it delivered a 50% faster planning cycle, 35% more accurate forecasting, and 2x faster aggregations. RECALIBRATE Some executives may be tempted to operate purely defensively with the goal of simply surviving the storm. But this will guickly look short-sighted when the world settles back to some kind of new normal. Will your organization be prepared to deal with a changed world? Will it be capable of continuous exploration, ready to innovate new solutions, and operationalize new ideas faster? Emerging on the other side of this crisis smarter, stronger, and ready to compete better than ever should be your real goal. RECALIBRATE IN ACTION More than 250 nursing homes and hospitals facing a shortage of resources needed to ensure timely delivery of critical food services. Leveraging Wipro's end-to-end Data, Analytics, and Automation and Data Discovery platform, we delivered the solution in just 24 hours. Reassess, Respond, and Recalibrate The next generation of leaders at the smartest organizations in the world aren't waiting for the crisis to end before they take action. They are starting right now to prepare their organizations for a transformed world. With the right partner, you can, too. To learn more about how to Reassess, Respond, and Recalibrate to build a bridge to a more successful future for your organization, go to https://www.wipro.com/analytics/. Industry: Jayant Prabhu Global Head and VP, Data, Analytics & AI, Wipro With a passion for driving data to decisions journey for Wipro's customers, Jayant has played multiple roles within Wipro in the area of Data, Analytics & AI. He has spent 22 years with Wipro and is a part of the Wipro DMTS (Distinguished Member of Technical Staff) Council. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the

automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. www.wipro.com/blogs/david-ranjit-william/ ----- Contact Wipro Blogs By Author 3 ways Servitization can change the game for high tech players Please fill the required details to access the content David Ranjit William David Ranjit William Digital Head, Technology BU, Wipro Ltd. David has over 20 years of IT experience working in the Communications & Hi-Tech industry. He is responsible for driving the Digital strategy for the Technology BU at Wipro. As part of this role he is responsible for demand generation, competency building, solution enablement and brand building initiatives for the Digital business within the Technology BU. Subscribing to products as a service helps customers get more bang for their buck

#### 3 ways Servitization can change the game for high tech players

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valuable insights on product usage and performance. A subscription approach can help hi-tech companies: Improve product performance and deliver a superior customer experience. A networking hardware provider selling data center routers moved to a subscription-based approach. Now instead of selling the hardware, they sell access and usage while retaining the ownership of the router - and by extension its data. This enables the company to securely and remotely access, diagnose, and troubleshoot the router even before the customer complains of any issues. Imagine the impact of such a service on customer experience! Connected products are creating a data based constant feedback loop allowing Hi-Tech companies to monitor product performance, predict and resolve issues proactively, and suggest measures to optimize product performance. Bound by privacy agreements and security protocols, access to cloud based product data is enabling industry players to improve reliability and uptime of the products. Technologies such as AR and VR are creating opportunities for next level customer support and field service. Boost revenue through new product capabilities and services A significant part of new age products is software. As such, it's easy to improve product performance through software updates sent directly to the device. Think OS upgrades on your phone. A very common occurrence today, OS updates boost the performance of your phone, introduces new features, and improves UX/UI without the need to go to a store. In certain cases, these upgrades would be chargeable and could become an additional source of revenue for the product company. For a company using a product on scale, remote upgrades can significantly minimize the time and effort involved. Differentiate to build lasting customer relationships In a market full of similar products, differentiation is essential for success. Customers today are looking beyond just the product and asking for real-time support, remote maintenance and upgrades, and self-service options that are easy to use. Product vendors need to deliver on these needs, and must shift focus from just creating products to building options for lifetime post sale support. Companies shifting to a subscription model need to define and follow a strategic roadmap to shift. Take a phased approach for migrating your existing customers on the new model. Educate, empower, and support teams driving the change. Also, price it right with an aim to increase both adoption and lifetime value. And offer value beyond just a pricing change - experience, packaging, ancillary services, flexibility etc. that align with the customer's goals. The tides have turned in the favor of a subscription economy. The era of one time product sale is over, and the focus is now on building recurring revenue. Whether it is Apple selling services like iTunes or Apple Music, or network equipment providers offering routers and switches as a service to telcos, both B2B and B2C models are undergoing a significant shift - from transactions to subscription. Can you capitalize on it? Let us know your views in comments below or write to david.william1@wipro.com Industry: David Ranjit William Digital Head, Technology BU, Wipro Ltd. David has over 20 years of IT experience working in the Communications & Hi-Tech industry. He is responsible for driving the Digital strategy for the Technology BU at Wipro. As part of this role he is responsible for demand generation, competency building, solution enablement and brand building initiatives for the Digital business within the Technology BU. The metaverse is here and with its fully immersive and augmented virtual experiences far superior to anything we have witnessed before, the boundaries between our physical and digital worlds may

gradually collapse for good. For many decades, the mission of tech support has been helping customers deal with a variety of issues covering the typical lifecycle of a software product. Support has been an essential part of selling and servicing software throughout the history of commercial computing. As hi-tech business models morph to accommodate new digital channels, new revenue streams, recurring revenue opportunities, and go-to-market strategies, companies need to be conscious of change across the 6 key ----- https://www.wipro.com/blogs/rajiv-pillai/ ----- Contact Wipro Blogs By Author CIO & the Art of Parenting Please fill the required details to access the content Rajiv Pillai Rajiv Pillai Chief Technology Evangelist, Global Infrastructure Services Rajiv Pillai is the Chief Technology Evangelist with the Global Infrastructure Services division and currently working on strategic themes like Enterprise Mobility enabling businesses to take benefit of upcoming trends like BYOD, VDI, Big-Data, etc. in a commoditized mechanism. Prior to Wipro, Rajiv was with Apple Inc. leading technology where the foundation of mobility, customer centricity and thinking different made its mark. Rajiv has over 17 years of varied experience from pre-sales consulting to technology sales to post-sales support management with a proven record of accomplishment in technical account management, business development, technology positioning and developing & managing Stepping into a CIO's shoes is guite like being a parent, over and over again. Parenting doesn't always start when a child is born or adopted. ==============

#### CIO & the Art of Parenting

----- Arcticle source ----- https://www.wipro.com/blogs/rajiv-pillai/cio-and-theart-of-parenting/ ---- About the Author Contact Wipro Related Blogs AI Helps Insurance Companies Make Smarter Decisions Why Digital Transformation Is All About People How to overcome the common barriers to Automation: 3 Emerging Trends Please fill the required details to access the content CIO & the Art of Parenting December | 2020 Stepping into a CIO's shoes is quite like being a parent, over and over again. Parenting doesn't always start when a child is born or adopted. It starts when a person thinks of having or adopting a child and plans for the future. It runs until either the parent or the child ceases to exist. This is pretty much the life cycle of a CIO project as well. It starts with the idea that crosses your mind or the project that gets discussed that becomes a journey through BAU (business-as-usual) operations, managed until you decide to let it go. A CIO must know the dynamics of the situation and decide whether the project is the right thing to do, whether the timing is right, and if it is sustainable, among other things. Like one of the most difficult decisions in life, whether to adopt or conceive, the CIO needs to decide whether to insource or outsource, keeping broader interests and capabilities in mind. Once the journey begins, each brings on board others who play a part in the project—doctors, friends and family, developers, architects, etc. The best CIO is not the one who is an individual contributor but one who is the sum of all his team members. Every member plays a crucial role in doing their part, especially during the delivery of the project. This is where the rubber meets the road, and the CIO

gets into the driver's seat. He is expected to continually take feedback and make changes to himself and his environment for the sole purpose of the newborn's well-being. The CIO needs to connect with his audience, understand each new circumstance, and adapt. He is also fed with data that may not be in sync with reality, and faltering is possible. Nevertheless, this is the learning curve. As new knowledge and new dimensions unveil themselves, the CIO needs to be open-minded to let the new in. Just as a child growing up needs the right balance of scaling heights and having a safety net below him, the CIO needs to evaluate security and freedom continually. This most crucial path is where many end up making decisions that change how the child grows. While many would argue on the requirement of freedom, others would showcase instances of failures caused due to such freedom. Although there may be no right or wrong, a CIO decides the best course based on his/her knowledge and the facts that can support the decision. Understanding expenses is often a challenge. While keeping the lights on, The CIO is also required to make provisions for the future. The ability to handle unforeseen expenses like hospitalization, software/hardware failures, etc. and known expenses like transformation and education is critical for sustained well-being. This requires a CIO to make sure that room for the future is made without cutting down on present experiences. It is often tempting to make the present very grand, but losing sight of the future could impair the child beyond repair at times. Once the critical aspects are set, day-to-day activities become a routine, and all that may be required is a minor tweak now and then. And this continues for life, either of the CIO or the child. Industry: Rajiv Pillai CIO - Americas Rajiv heads Wipro's internal IT operations and strategy for the United States, Canada, and LATAM geography leading with emphasis on user-experience, business continuity, and digital transformation. He provides the pivot for realizing business strategies for the larger taskforce while aligning the ground operations. Rajiv's 25+ years of experience spreads across Technology Consulting and Evangelism, Customer Support, and Partner Management portfolios globally. Financial Services is one of the most challenging industries from a technology standpoint. Digital business transformation is now critical to the survival of virtually every organization, but effective change management must center on people. Successfully implementing automation systems might never be "easy," but platforms and solutions have emerged to make it as frictionless as possible.

# The Future of Software Defined Vehicles Requires Converging Enterprise and Embedded Hypervisors

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required details to access the content The Future of Software Defined Vehicles Requires Converging Enterprise and Embedded Hypervisors June | 2021 Traditionally, vehicles used to have standalone systems such as telematics, instrument cluster, and the infotainment system. To reduce the cost of development and maintenance of these independent systems, vehicle OEMs are adopting a single hardware approach. But having all the functionality on a single hardware platform introduces security and safety concerns. This is where hypervisors play an important role. A hypervisor is a software component that provides a virtual environment allowing multiple systems to run on the same hardware platform, while providing isolation between each of these systems. There are two categories of hypervisors: enterprise and embedded. As the names suggest, enterprise hypervisors run on enterprise servers, while embedded hypervisors are used on devices with embedded software (like vehicles). Software complexity is continuously increasing as users expect more features for safety and comfort needs. To meet these market demands, vehicle OEMs need to include a hardware platform with high computing resources, similar to a server platform. To accommodate the growing software needs in vehicles, the features of both categories of hypervisors will need to converge as automotive hardware platforms become similar to enterprise servers. Why are Hypervisors Important? Hypervisors have been used on servers for a long time to minimize the number of individual servers needed for each operating system. But there are many other features of hypervisors that have made them so appealing: Enterprise hypervisors are used on enterprise servers with high compute resources and have more control of VMs and resources. These are feature rich, but high in footprint. By comparison, embedded hypervisors are used on embedded systems where resources are constrained (e.g. industrial equipment, medical devices, mobile devices, and automobiles). Embedded hypervisors have real-time behavior, are small in memory footprint, and have less interrupt latency. Enterprise and Embedded Hypervisors Need to Converge In the automotive sector, customers expect a vehicle to stay relevant for many years and enjoy up-to-date features for guite some time. The growth of software defined vehicles - where software enables a large number of functions - has made these expectations possible. However, for this potential to be fully realized, OEMs need to use highcomputing hardware platforms that can accommodate future software needs. And, as network speeds increase due to 5G/6G, the trend to dynamically offload software functions to edge computing and cloud platforms will increase, further expanding the use of hypervisors. The high computing hardware platforms could be dual SoC (System on Chip) or guad SoC. Based on the load on each of the SoCs, hypervisors could move functionality from one SoC to another or to edge or cloud platforms. And, in the case of failures, redundancy of VMs will be needed to ensure continuity of service. To accommodate these future demands, hypervisors will need to support dynamic addition/removal of VMs, change the configuration with respect to compute resources, and migrate VMs from one SoC to another. Considering that enterprise hypervisors already have these features, the next logical step is to bring enterprise hypervisor functionality to embedded platforms based on Advanced RISC Machines (ARM) and RISC-V (apart from x86), optimizing the footprint, providing real time performance, and meeting the latency requirements of automotive systems. The figure below explains the factors/features of a converged version of the hypervisor. Figure 1:

Convergence of Embedded and Enterprise Hypervisors Hypervisor Convergence is Just Starting There is evidence that this convergence is underway. VMware, one of the leading enterprise hypervisor vendors, recently made its hypervisor available on ARM for evaluation. When the ARM-based VMware hypervisor is available for commercial use, it can be used on servers. These ARM-based enterprise hypervisors are optimized from a footprint perspective and can be used in embedded systems. It is no surprise that VMware is extending the capability of their enterprise hypervisor. According to MarketsandMarkets, the global automotive hypervisor market alone is projected to grow at a CAGR of 39.3% by 2026. To meet the demands of this fast-growing market, both enterprise and embedded hypervisors need to converge capabilities. There will be challenges surrounding convergence like keeping the performance and footprint in check and added concerns over security. But one thing is certain; hypervisor convergence is needed to accommodate the growing requirements of new targeted products and continue to meet the evolving demands of today's automotive customers. Kishore Kanala Principal Architect, Wipro Kishore has over 2 decades of experience on various Linux based systems. He has helped customers in the development of Android and Linux based Smartphones, enterprise devices, IoT, automotive infotainment systems, and Smart TV. At Wipro, he is responsible for the Android and Linux platforms for these segments. Currently, Kishore is designing a virtualization automotive platform evolving towards software-defined www.wipro.com/blogs/elizabeth-sisco-green/ ---- Contact Wipro Blogs By Author Wipro and IBM join hands to modernize mission-critical workloads across hybrid cloud environments Please fill the required details to access the content Elizabeth Sisco Green Digital transformation was a trendy topic that gave off the impression of being at the cutting edge of technology \_\_\_\_\_

#### Wipro and IBM join hands to modernize mission-critical workloads across hybrid cloud environments

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real intentions behind these words in 2010 when digital transformation first became popular as an industry term due primarily to IBM's recognition of ITas-a-service provisioning model for enterprises, people got tired hearing about it too often. It became a popular topic at many panel discussions with topics like "digital disruption" but adoption rates were patchy. When the pandemic hit, we saw companies learn to transform in real time as they simultaneously juggled a new way of working with their workforce. The epidemic forced businesses to accelerate digitization efforts - it was no longer optional but critical for survival. Many teams and organizations initially found themselves struggling with programs that had not fully implemented or were still evolving workflows, so transition often wasn't seamless at first. The pandemic gave us a crash course in reality. It showed everyone that companies will always need to move quickly, adopt new technologies, and do something unexpected. The ability to do these things quickly and in an automated way impacts your business's digital transformation. At Wipro, we have been helping our clients use intelligent processes for their day-to-day operations which are designed around cognitive computing capabilities like artificial intelligence (AI) analytics and augmented data visualization solutions; this helps disrupt old world practices with innovative thinking while also improving efficiency across the board! Luckily, the infrastructure to catalyze this swift evolution is already in place with cloud technology. Cloud technology provides companies from every size and industry with supercharged business responsiveness enabling them to move faster than ever before by adopting new technologies (like remote collaboration) at their own pace without IT resources; providing customers access to information across devices when they need it most, on demand through mobile apps or e-mail updates; giving employees work options like working remotely or working as part of a virtual team. For years Wipro has been dedicated to helping clients hyper-automate processes, redefine operations and reimagine their customer journey. Wipro believes in working in a collaborative ecosystem, and over time, we've launched several projects with our partners at IBM. Wipro and IBM make a great team together. Together, Wipro and IBM have collaborated to bring automation innovations to clients in the Middle Eastern manufacturing sector. We were engaged in creating a strategic digital business automation platform to deliver various services through the manufacturer's e-portal. Creating a robust solution around IBM's technology that addressed the client's needs helped us be successful. In doing so, we were able to improve productivity and workflow for the client. And this is why, at IBM Think 2021, we announced our intent to join IBM's broader ecosystem of partners, using IBM's new Automation Foundation and IBM Cloud Paks for Automation to manage and modernize its mission-critical workloads across hybrid cloud environments. We're now in an environment where most enterprises have multiple clouds and plenty to choose from. More importantly, 73% of our clients believe that the ability to move between those clouds is a highpriority area. IBM Cloud Paks for Automation, AI-powered hybrid cloud software solutions built on Red Hat OpenShift, offer enterprises a portable, flexible and secured path to optimization by automating business and IT processes to accelerate growth. Our ultimate goal is to help streamline business processes through AI-powered automated tasking using data analytics. This new offering will allow our customers to unlock their digital transformation in an efficient, streamlined, and cost-effective way. The past

year of remote work has taught us a lot, and it hasn't always been easy. We believe that this is the solution to help bridge the divide between modern workloads across hybrid cloud environments. As the world begins to see light at end of long tunnel, leaders are empowered for new challenges which may arise in future. Industry: Elizabeth Sisco Green Global Head of IBM GTM at Wipro In this role, she is responsible for global sales, developing service offerings, and managing partnerships. With over 25 years of experience in international sales, Elizabeth has led diverse teams from various geographies, business lines, and corporate functions, and is skilled at managing complex projects, large businesses, and go-to-market Prior to joining Wipro, Elizabeth held various leadership positions, including VP of Sales at CrossView and Global Sales Manager for IBM. Elizabeth holds an MBA in international management and a BA in advertising. She is a strong believer in the importance of diversity and inclusion, sustainability, and using technology to better global business and the world. She is a mother to twins and a new grandmother to a beautiful baby boy. When she is not working, she can be found camping, hiking, kayaking and traveling. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business benefits that come with them. =============== Arcticle source ---- https://www.wipro.com/blogs/matt-early/ ---- Contact Wipro Blogs By Author Five reasons why charities need to go digital Is Salesforce Right for My Nonprofit Organization? Please fill the required details to access the content Matt Early Matt Early Project Delivery Lead, Wipro Ltd Matt specializes in nonprofit and education mission impact enablement. His experience includes driving digital transformation within the nonprofit and education sectors across the US and Europe within operational, commercial, salesforce administrator, and project leadership roles. Charities have been around for centuries and charitable organisations have endured many crises. Salesforce offers an incredible range of functionalities, making it difficult to find....

## Is Salesforce Right for My Nonprofit Organization?

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Discipline De-Risking Mainframe Modernization for the Banking Industry The Day After: De-risking Legacy Modernization Please fill the required details to access the content Is Salesforce Right for My Nonprofit Organization? June | 2021 Salesforce offers an incredible range of functionalities, making it difficult to find which features are most relevant to a nonprofit's goals and processes. It is a powerful tool with vast potential, which can be both exciting and intimidating. For nonprofits that have yet to embrace a digital transformation, or for those not satisfied with the current level of automation in your organization, here are seven reasons why Salesforce is right for any nonprofit organization. Industry: Matt Early Project Delivery Lead, Wipro Ltd Matt specializes in nonprofit and education mission impact enablement. His experience includes driving digital transformation within the nonprofit and education sectors across the US and Europe within operational, commercial, salesforce administrator, and project leadership roles. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business 

## Five reasons why charities need to go digital

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know what messages to send to what audiences. "People are not the same. People have different tastes," explains Sema Gornall, Head of Fundraising & Alumni Engagement at the Florence Nightingale Foundation during a conversation with Wipro. The Florence Nightingale Foundation offers research, travel and leadership scholarships and bespoke leadership programmes to nurses and midwives across the UK. "You have generation gaps, you have background, location, etc. You need to be able to serve different meals to different people." After the Florence Nightingale Foundation implemented Salesforce, they were able to send out the first enewsletter in the foundations' 90-year history - with an amazing opening rate of over 45%. "Our audience was waiting for us to engage with them," said Gornall. In a second phase, the foundation started segmenting the mailing list based on behavioural science. Being able to segment donors based on consumer behaviour allows you to eliminate communication that is not applicable to certain donors. This helps build a better reputation with your sponsors. Build long-term relationships Understanding supporters and donors better, helps nonprofits make smarter decisions on how to address these different groups. It is time consuming to build relationships with donors and charities don't want to lose them by sending messages that don't resonate with them or using channels that don't fit their behaviour. An older demographic group will respond well to fundraising through magazines for instance, but younger demographic groups prefer digital channels. By sending the right messages through the right channels, charities can increase brand loyalty. Better customer service Having all the information in a database means everyone in the organisation has a clearer view on what is going on and what colleagues are working on. "Even if you are working in an open space, you will not know the details of operations," said Gornall. "This makes it difficult to ensure follow-up if a colleague is off sick or on holiday. After we digitised, we found that we were able to help anyone calling us, no matter what the inquiry was about. We are now working better together and we increased our impact and interest in the foundation by delivering better customer service." Improve quality of data, saving time in the process A database serves as a single source of truth when all information is entered correctly. By digitising processes, the quality of data can be significantly improved, especially if you also automate the input process. The Florence Nightingale Foundation receives thousands of applications a year. Until recently, the application process was paper-based, taking up a large part of the staff's time. The foundation automated the entire process and implemented online forms so that applicants can fill out their information immediately. This increases data quality and completeness, and saves considerable time. Connecting people Digitising processes allows charities to connect with their stakeholders in times when mass events and face-to-face meetings are less likely to happen. "We are now able to connect our alumni members and it's like a big family," said Gornall. "We wanted to be connected to people who had the same scholarship journey." What's more, more junior nurses and midwives are now connected to more experienced colleagues, thus allowing for continuous professional development. The Florence Nightingale Foundation was also able to increase its followership on social media, effectively doubling the number of followers of its Twitter account. Plenty of good reasons, then, to start digitising a charity. But as we experienced at Wipro, our business unit that focuses solely on nonprofits, digitising is not about technology alone.

Introducing digital processes represents a huge change, not only for the employees of a charity, but also for the donors, volunteers, partners, etc. Change management, making sure every stakeholder knows what is in it for them, will help ease the transition to a new, digital way of working. Digital transformation is a journey that does not end when the implementation is done. Maintaining and running the system is just as much a challenge as designing and implementing it. Industry: Matt Early Project Delivery Lead, Wipro Ltd Matt specializes in nonprofit and education mission impact enablement. His experience includes driving digital transformation within the nonprofit and education sectors across the US and Europe within operational, commercial, salesforce administrator, and project leadership roles. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business benefits that come with them. 

www.wipro.com/blogs/soujanya-unnam/ ----- Contact Wipro Blogs By Author Why Security Assessment is Important for Nonprofit Organizations Please fill the required details to access the content Soujanya Unnam Soujanya Unnam Salesforce Functional Solution Architect, Wipro Limited Soujanya Unnam has over 10 years of experience in business analysis. She has extensive experience in Salesforce consulting including the nonprofit domain where she has successfully implemented Digital Marketing with the Nonprofit Success Pack (NPSP) initiative. A passionate Business Analyst and a Salesforce enthusiast, Soujanya strongly believes that communication and curiosity are key soft skills so critical needs are surfaced and understood. Soujanya holds the following certifications - Salesforce Administrator, Salesforce App Builder, and Salesforce Certified CPQ Specialist. Research by the Nonprofit Technology Enterprise Network (NTEN) states that only 25% of nonprofit organizations actively monitor their network for security events. and only 7% have undergone a cyberattack simulation activity. The low investment in security can be attributed to the small size of most nonprofits and their data sets, which makes them believe they have a lower risk of cyberattacks compared to large profit organizations. In reality, nonprofit organizations are low-hanging fruit for hackers due to the gap between the security risk and the actions needed to address the risks. That is what makes nonprofits ideal targets, and why they should take steps to protect 

#### Why Security Assessment is Important for Nonprofit Organizations

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organizations by completing an independent assessment with a findings report, preparing a roadmap to a healthy and secure environment, and provide recommendations for future assessments. Click here to schedule a free one hour consultation. Industry: Soujanya Unnam Salesforce Functional Solution Architect, Wipro Limited Soujanya Unnam has over 10 years of experience in business analysis. She has extensive experience in Salesforce consulting including the nonprofit domain where she has successfully implemented Digital Marketing with the Nonprofit Success Pack (NPSP) initiative. A passionate Business Analyst and a Salesforce enthusiast, Soujanya strongly believes that communication and curiosity are key soft skills so critical needs are surfaced and understood. Soujanya holds the following certifications - Salesforce Administrator, Salesforce App Builder, and Salesforce Certified CPQ Specialist. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern source ----- https://www.wipro.com/blogs/business-strategy/ ----- Related Articles Contact Wipro Filter Please fill the required details to access the source ----- https://www.wipro.com/blogs/digital-transformation/ ----- Related Articles Contact Wipro Filter Please fill the required details to access the Arcticle source ---- https://www.wipro.com/blogs/technology-trends/ -----Related Articles Contact Wipro Filter Please fill the required details to ---- https://www.wipro.com/blogs/thought-leadership/ ---- Related Articles Contact Wipro Filter Please fill the required details to access the content ---- https://www.wipro.com/blogs/mahesh-chandra/ ---- Contact Wipro Blogs By Author Reinvent bank risk management to align with the changing operating environment Please fill the required details to access the content Mahesh Chandra Mahesh Chandra Vice President and Sector Head -Citigroup, Americas Mahesh is Wipro Limited's leader for Citigroup and spearheads the account with responsibility comprising sales and customer engagement of various transformation and digital programs. He is an accomplished business and thought leader with 24+ years of experience in managing large programs connected to infrastructure, risk and compliance, and business transformation. In addition to his tenure at Wipro, Mahesh has worked at Cognizant, HP, DEC, and Fujitsu UK. Risk management and control frameworks have always been a critical function for banks

#### Reinvent bank risk management to align with the changing operating environment

----- Arcticle source ----- https://www.wipro.com/blogs/mahesh-chandra/ reinvent-bank-risk-management-to-align-with-the-changing-operatingenvironment/ ---- About the Author Contact Wipro Related Blogs A New Generation Emerges in India's Evolving Payment System For a successful BFSI cloud transformation, build your complex landing zone right Modernizing the Core Banking System: Enabling the Future Please fill the required details to access the content Reinvent bank risk management to align with the changing operating environment June | 2021 Risk management and control frameworks have always been a critical function for banks, but in recent years, they have become even more important in light of increased regulation in the aftermath of the global financial crisis and growing consumer privacy concerns. The pandemic environment of 2020 revealed gaps in existing risk management and control frameworks as banks were forced to rely more on their digital infrastructure and more fraudulent activity occurred. Many large US banks were fined heavily by regulators in 2020 for poor and inadequate risk management controls and practices, resulting in increased pressure on banks to overhaul their existing rule book. A report from LexisNexis Risk Solutions found that the amount large US banks spent on anti-financial crime compliance operations increased by 43.4% in 2020 as compared to 2019. Today, many banks are reexamining risk management to serve their customers safely and effectively and minimize fraud, data leakage, and cybersecurity issues. And banks that have a strategic focus on growth, digitization, and customer experience are considering upgrading or rewriting their risk and control frameworks to develop greater operational resilience and improve governance. Leading Strategic Imperatives to Improve Risk & Control Frameworks Wipro has identified four imperatives in applying risk and control frameworks in banking systems and operations. Imperative 1: Enhance governance, operating model & culture One major consequence of the pandemic and its attendant economic fallout is that the operational environment of banks is evolving rapidly and is likely to be very different from what it is today. To put that in perspective, consider this forecast from McKinsey: Collectively, banks could lose revenues of \$1.5-4.7 trillion between 2020 to 2024 - and a good part of that revenue will be lost forever. This challenging environment coupled with changes in banking regulations, the need to create more and better digital products, and the rise of non-bank (fintech) competitors - is creating a need for banks to redefine their core operating models away from legacy practices and towards new-age requirements. Banks need to build a new culture around risk management and governance if they want to thrive in the near-term and position themselves for the long-term. Boards of directors and C-suite executives will be crucial in defining risk tolerance and fostering a culture that puts risk management and governance at the center of strategy and operations. Better risk management and governance demand the creation of detailed risk models, improved management information systems, risk/return-based management, early warning systems, and stress tests. Banks must leverage a risk-based prioritization framework while incorporating automation and standardization in internal controls to test their governance and cultural design and to increase operational resilience. Imperative 2: Break down silos to improve collaboration In the current environment, a key to growth and the development of new products, capabilities, and experience is breaking down silos within the bank. Traditionally, business units operate within their lines and don't take a holistic view. Not only does this hamper growth but a siloed approach also generates risks that might be unobserved by executive management. The treasury function is an example that faces the impact of inter-departmental conflict in the data flow, resulting in higher costs and lower revenues. According to a report from BCG, "It's Time for Banks to Self-Disrupt," 70% of banks' treasury functions lack the data, modeling, and analytical tools to address balance sheet and risk management in a meaningful way. The survey also observed that better collaboration between internal teams can help provide relevant information at the right time, which could help improve treasury operating costs and net interest income. The need for collaboration becomes even more essential today, as banks continue to develop and add new system architectures on top of their existing IT frameworks. New additions can result in breaches and failures can emerge in unanticipated areas mainly because of the lack of attention given to legacy systems. Today, banks must be vigilant about collaboration and consolidation to reduce risks, ensure efficiency, and increase productivity. Imperative 3: Embrace new technologies Controlling identified risks requires a fundamental change in banks' outlook as they formulate and execute their risk strategy. The commonly adopted technology-based use cases - automation of the risk function, migration to the cloud, and strengthening financial crime capabilities - have led to increased flexibility and reduced costs. Banks maintain large amounts of data, and most have data in multiple, unconsolidated systems - a situation with enormous risk management consequences as hackers look for vulnerabilities. Many banks already apply advanced technologies to operational processes to identify risks, but they should also explore investments in advanced analytical management information systems to anticipate risks. The BCG report says that North American banks paid \$228 billion in penalties for non-compliance between 2009-2019. Data breaches and fraud are the primary reasons for increased regulatory scrutiny of the banking industry (particularly large institutions). There are several advanced technologies available for risk management, and banks need to have a clear strategic roadmap to pick the most relevant technology innovations. They also need to evaluate these technologies from the perspective of interconnectedness to derive maximum efficiency and effectiveness. Imperative 4: Strengthen operational and procedural resilience Today, operational resilience is as important to banks as financial resilience. Banks are adding new functionalities to their businesses by revamping legacy systems, embracing digitalization in operations, and collaborating with fintechs. All of these initiatives can help banks anticipate and identify problems much more quickly. Reports on disaster response, data security, third-party vendor management, and business continuity plans have become governmentmandated requirements. As banks embrace digitalization, strong board and

management involvement in defining governance, operating models, and cultural change is critical. While uncertain circumstances are inevitable, the focus should be on defining the tolerance level of the bank including recovery time and the financial impact of unrest. A well-thought-out response strategy and disaster management execution plan should be part of all operational initiatives undertaken by banks. Data is another area that should be prime risk management and governance focus for banks. One instance of a data breach could cost a bank significantly, both in terms of reputational damage and money. Ensuring data quality and data governance should be critical aspects in developing operational and procedural resilience. Three Tactical Ways to Improve Risk & Control Frameworks The changing risk management challenges require banks to focus on staying up to date with new methods to deal with risk and control frameworks. Here are three tactics for banks to strengthen their risk management and control frameworks in this rapidly changing operating environment. For many banks, the critical way to improve risk management is to move away from legacy architectures and invest in updated technology that provides realtime information. Large banks already spend substantially to ensure regulatory compliance and risk management systems, but focusing on investment in contemporary technologies can help with the ongoing challenge of risk management. Blockchain and artificial intelligence, for example, are starting to demonstrate real potential in the risk and compliance space, according to BCG. Banks should also consider partnerships with the emerging "regtechs" (regulatory technology) companies that understand the challenges of global banking and apply information technology to address them. Regtechs can provide a risk management roadmap to simplify organization structure and streamline security and compliances processes to avoid failures and data breaches. Automation has helped banks become the highly efficient enterprises they are today, but automation's potential to improve efficiency and minimize risks remains enormous. There are multiple success stories of automation techniques helping companies predict customer defaults faster, resulting in more effective risk prevention. Traditional banks should consider rebuilding the value chain for every function and analyze what automation technologies each value chain demands. This must be done with an emphasis on consolidation to support seamless information flow across all systems while also ensuring compliance and security. In a regulated industry like banking, it's important to manage risk in all its forms and to ensure compliance with the letter of the laws and regulatory mandates. Effective risk management and control frameworks must continuously improve and evolve. Technology, of course, has a substantial part to play in this challenge. The right technology, implemented effectively, can help banks manage known and predictable threats and do so in ways that save time and money. Today's technology can make every enterprise more resilient, and resilience is an incredible asset when dealing with a changing environment. But dealing with change, particularly dealing with the unpredictable, also demands leadership, to build a culture that recognizes the critical importance of risk management and control, that reinforces values and ethics, and that understands what failure in risk management can bring. Periodic reviews of policy, governance, regulatory changes, technological advances, and industry best practices can help. The best way to proceed is by developing a strategic roadmap for risk management and making it an enterprise agenda

to create a competitive edge in the changing operating environment. Industry: Mahesh Chandra Vice President and Sector Head - Citigroup, Americas Mahesh is Wipro Limited's leader for Citigroup and spearheads the account with responsibility comprising sales and customer engagement of various transformation and digital programs. He is an accomplished business and thought leader with 24+ years of experience in managing large programs connected to infrastructure, risk and compliance, and business transformation. In addition to his tenure at Wipro, Mahesh has worked at Cognizant, HP, DEC, and Fujitsu UK. Supported by: Shri Dhar - Senior Manager, Insights Radhika Todi - Assistant Manager, Insights India's payment journey has changed significantly over time. What started as a barter system has evolved into cashless payments Migrating your data and services to a public cloud service like Google Cloud offers multiple advantages, including increased flexibility and agility.... Traditional banks are reinventing themselves to meet rapidly evolving customer expectations, www.wipro.com/blogs/sustainability/ ----- Related Articles Contact Wipro Filter Please fill the required details to access the content Sustainability www.wipro.com/blogs/katy-hebert/ ---- Contact Wipro Blogs By Author Sustainability Begins with "Me" Please fill the required details to access the content Katy Hebert Katy Hébert Strategic Go-to-Market Lead, Europe Katy Hébert is a Strategic Go-To-Market Lead for Europe at Wipro who has a 10+ year background in sales and delivery for digital transformation projects across verticals. Bringing a strong understanding of delivery best practices into marketing, Katy's unique background provides her with a critical understanding of customer needs, and the path to success for customers on a transformation journey, enabling her to understand and evaluate the priority needs of Wipro clients and partners The widespread work-fromhome trend caused by the Covid-19 crisis contributed 

#### Sustainability Begins with "Me"

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sales and delivery for digital transformation projects across verticals. Bringing a strong understanding of delivery best practices into marketing, Katy's unique background provides her with a critical understanding of customer needs, and the path to success for customers on a transformation journey, enabling her to understand and evaluate the priority needs of Wipro clients and partners. Mining companies are taking an increasing interest in adding components of AI and Automation into their digital landscape to cover a host of uses cases from document investigation on geological surveys, environmental impact studies, and complex reports and documents on safety and assets using natural language processing (NLP), as well as processing of old paper-based mapping and drill logs into digital formats to exploration targeting, for regional areas and local within the existing mining. This has led to an upsurge in capital investments and a greater need for effective technology planning strategies as enterprises replace legacy Arcticle source ---- https://www.wipro.com/blogs/vivek-karmakar/ -----Contact Wipro Blogs By Author Supply Chain Transformation: Six Capabilities for a Modern Network Please fill the required details to access the content Vivek Karmakar Vivek Karmakar Chief Data Scientist, AI Solutions, Wipro Vivek has spent 20+ years in Data Science and Machine Learning solution consulting across functional areas like marketing, supply chain, pricing, and promotion. Throughout his career, his major focus has been delivering business outcomes for clients through data driven decision augmentation and automation solutions. Vivek is a senior member of the Distinguished Member of Technical Staff. The pace of growth around the world has led to globally distributed, multi-tiered, large, and complex.

## Supply Chain Transformation: Six Capabilities for a Modern Network

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failing to adopt technologies that can help them develop resilient and optimized supply chain networks. Yet modernized supply chains that can handle volatility and risk may now be on the agenda. A recent study by BCI shows that the top management in almost 49% of organizations are more committed to managing supply chain risk, with 55.6% wanting to leverage technology to handle disruptions. When introduced into the supply chain, AI and digital technologies have had a significant positive impact on organizational performance. According to a McKinsey report, AI-enabled, demand-driven supply chain planning reduces lost sales by 65% and reduces inventory 20-50%. It also decreases warehousing and supply-chain administration costs to the tune of 5-10% and 25-40%, respectively. Subsequently, 61% of the supply-chain executives surveyed reported reduced cost and 63% reported increased revenue driven by AI enabled supply chain transformation. Capability Test for Modern Supply Chains So what does an aspirational and modern supply chain look like? It should be and enable companies to become - more agile, flexible, reliable, and efficient. The capabilities embedded and integrated within the modern processes should also be able to pass the following capability tests: Predictive A modern supply chain should have predictive capabilities embedded within the customer order journey so it can provide a reliable lead time and delivery schedule. It should also sense and shape the future demand of finished products across locations to ensure effective and optimized inventory and raw material planning. Preemptive A digital and intelligent supply chain should proactively monitor global and local events, logistics network, weather, and situations that could have a negative impact on any aspect of the supply chain, including supplier capability. The supply chain should then provide preemptive alerts that enable mitigation. Reliable Customers will expect a more robust experience enabled by an intelligent, modern supply chain. The supply chain needs to protect delivery commitments across multiple stages, with a focus on driving efficiency to reduce the lead time to deliver. Dynamic Today's supply chain is a complex network of multi-tiered suppliers, locations, and logistics, with parts, components, and finished products. A resilient supply chain network needs to have dynamic capabilities to automatically identify the most effective alternate plan to mitigate any adverse situation across the network. It also needs to be able to handle returns. Overall planning must also include dynamic integration of reverse logistics and circular-economic principles. Personalized Enabling a personalized experience is not just transforming and modernizing customer-facing functions. It needs to also extend to supply chain capabilities. Is the supply chain technology capable of dealing with the pallet-to-parcel transformation to match customer expectations? Can it provide personalized choices to customers about delivery modes and pricing, or provide near real-time visibility to customers about order stages? Participatory A globally distributed supply chain involves multiple suppliers, logistics partners, warehouse partners, factories and more. It's critical to ensure efficient collaboration across all partners to drive predictability, reliability, and efficiency. Different systems, technology, and platforms used by various entities pose a big challenge for effective collaborative planning. Creating a digital version of the physical supply chain can provide the foundation for effective collaboration between different parties. The expectations may sound guite daunting. However, given the pace with which digital economies have transformed customer expectations, it becomes

critical for organizations to embed AI and digital technologies across all aspects of the supply chain - planning, sourcing, manufacturing, warehousing, logistics and delivery, and customer service processes - to gain a competitive advantage. Technologies like IoT, Graph Analytics, machine learning, OCR, visual intelligence, conversational AI, cognitive search, and robotics need to be integrated to create a digital, intelligent, and modern supply chain that empowers companies to achieve this vision. Industry: Vivek Karmakar Chief Data Scientist, AI Solutions, Wipro Vivek has spent 20+ years in Data Science and Machine Learning solution consulting across functional areas like marketing, supply chain, pricing, and promotion. Throughout his career, his major focus has been delivering business outcomes for clients through data driven decision augmentation and automation solutions. Vivek is a senior member of the Distinguished Member of Technical Staff. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force.

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Annapoorna Venkateswaran Practice Head, Application Engineering and
Modernization, Wipro Digital In her current role, Annapoorna focuses on
engineering productivity. Previously, she led delivery organizations for
global companies in the financial sector, mainframe best practices,
modernization (in-the-box), and automation Center of Excellence.
Annapoorna has been with Wipro for 23 years and continues to lead the
DevOps practice. The IT sector is still struggling with an effective measure
for productivity. Companies need to re-examine the true nature of
development and what are the ultimate goals. Learn what should now be
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## A Modern Definition of Developer Productivity

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details to access the content A Modern Definition of Developer Productivity June | 2021 Productivity is a term used to measure the performance of a process where the output from continuous improvement becomes more efficient. The concept began in the manufacturing sector and slowly transitioned to a way of evaluating the work performed by human resources leveraged in any process. Essentially, productivity became a marker to evaluate performance. Historically, IT has closely followed the concepts and processes of the manufacturing sector. But IT services are different from manufacturing. Ideally, manufacturing produces large quantities of identical, high quality items. While IT strives to produce high quality output, the work product is never the same. Software is in a constant state of change. If the work product is always different, how can a standardized definition of productivity measure varying outputs? This may explain why the IT sector is still struggling with an effective measure for productivity. To develop a more meaningful definition of developer productivity, companies need to reexamine the true nature of development and what are the ultimate goals. Developer Productivity Metrics: The Challenges The IT industry has consistently struggled to objectively define and measure developer performance. The nature of software development inherently presents a few challenges when defining standards. First, there is a strong belief that outcome is more important than intermediary outputs, casting doubt on the need to measure productivity. Second, since no two applications serving the same purpose across an enterprise are similar, baselining is not possible. Third, lines of code, once a common metric of productivity, are no longer applicable as language frameworks have increased technical reusability of code. And to further complicate the issue, no developer has the same pattern of work or deliverables across a week or even 2 days making it impossible to use a baseline for measurement. To be sure, IT teams use processes and tools for baseline workflows, but how these resources are leveraged by the developer community is distinctly individual. Should Baselining be Used in Developer Productivity? When measuring performance in other business sectors, the work done on the input to generate the output is close to 100% standard operating procedure (SOP) based. While SOP exists in the IT ecosystem, the role it plays is governing and advisory guidelines for application development. Each individual developer is given the space to improvise, think of an alternate approach, and suggest variations on how the business requirement could be converted to a feature. The code developed goes through continuous changes making knowledge of code behavior key for managing the application. Therefore, developer productivity should not only focus on the application code that is delivered, it should measure the behavior of the developer community that creates and enhances the application. The unique nature of a developer's work brings up some interesting questions: Improve the Outcome of the Entire Software Development Life Cycle Surprisingly the pandemic has brought clarity and a renewed focus on what makes IT ecosystems different. New data points including developer satisfaction, the kind of team that is managing the code, skill capability, and other issues like cross-skilling are changing how developer productivity is defined. These new focus areas impact the level of productivity of the team and should be factored into a new definition of developer productivity metrics. Many companies are now including these new metrics into the definition of productivity: These focus areas give engineering managers the ability to look at "developer patterns"

concerning the application and find ways to mitigate the risk related to quality and team composition. The focus of productivity should be to get development teams into the "ownership" mindset that leads to delivering well maintainable, effective and efficient features, and promotes the desire to continuously improve. This new perspective means productivity can become one of the key metrics that identifies valuable insights to improve the outcome of the entire software development life cycle and not just the output of a single developer. Modern Developer Performance Metrics What makes this approach implementable is the kind of tools already available in the DevOps ecosystem. It has a lot of data points which can guide engineering managers to measure this kind of productivity faster and in an impactful way. The focus should move to prioritize what are the metrics in the IT ecosystem that impacts the business, improves processes, and manages developer's needs. This gives clarity on the areas that make the biggest impact on ROI. Identifying patterns and trends on these metrics helps to create focus groups, invest in the right automation, improve team structure, and improve skills and cross training. Covid and work from home have brought in mental wellness and satisfaction (or happiness) markers into these metrics. For those practicing DevOps, there are a variety of measurements that each organization can use to measure business impact and quality. These metrics can be enhanced to include the modern productivity perspective - team and developer patterns. Developer inclusive DevOps Metrics Measuring impact to business Measuring application quality Measuring team (or individual developer) patterns Focusing on productivity is key to objectively look at change and growth of the IT ecosystem. But it is time for companies to modernize the definition of productivity to one that is more focused on impact, not just velocity. Today's measurement should not be a way to rank individual developers or developer work products but rather the impact to the business and the impact to the entire software development life cycle. Industry: Annapoorna Venkateswaran Practice Head, Application Engineering and Modernization, Wipro Digital In her current role, Annapoorna focuses on engineering productivity. Previously, she led delivery organizations for global companies in the financial sector, mainframe best practices, modernization (in-the-box), and automation Center of Excellence. Annapoorna has been with Wipro for 23 years and continues to lead the DevOps practice. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... Research by the Nonprofit Technology Enterprise Network (NTEN) states that only 25% of nonprofit organizations actively monitor their network for security events, and only 7% have undergone a cyberattack simulation activity. The low investment in security can be attributed to the small size of most nonprofits and their data sets, which makes them believe they have a lower risk of cyberattacks compared to large profit organizations. In reality, nonprofit organizations are lowhanging fruit for hackers due to the gap between the security risk and the actions needed to address the risks. That is what makes nonprofits ideal targets, and why they should take steps to protect themselves.

# The Confluence of Actuaries and Data Science: Challenges and Opportunities

----- Arcticle source ----- https://www.wipro.com/blogs/anirudh-bhattacharjee/ the-confluence-of-actuaries-and-data-science-challenges-and-opportunities/ ---- About the Author Contact Wipro Related Blogs 4 Ways Super Funds Can Elevate Member Experience The CHRO Imperative for the Hybrid Workplace How organizations should identify and cope with the challenges to cultural transformation? Please fill the required details to access the content The Confluence of Actuaries and Data Science: Challenges and Opportunities June | 2021 Many refer to actuaries as original data scientists. They work extensively with data to provide meaningful insights to the entire insurance ecosystem at large. The confluence of actuaries and data science aims to bring transformation by developing innovative products, lowering distribution costs, introducing better risk management practices, and ensuring dynamic reporting concerning local and international regulations. Traditionally, actuaries used the Actuarial Control Cycle framework to identify problems, develop solutions, and monitor them, end to end. However, this confluence has led to the evolution of the "Actuarial Data Science Control Cycle." Figure 1: Framework at a glance Challenges that come with this confluence Some of the challenges faced by an insurance carrier are elaborated in Figure 2. Figure 2: Challenges faced by insurance carriers How to leverage the confluence Developing an operating model that integrates the two domains is the key to leveraging the best of both worlds. The areas where the early confluence can be witnessed are distributions, pricing of insurance products, risk management techniques and mitigation, claims, in force creation, and liability valuations. Benefits to realize with this confluence Reserving process will become more streamlined, and the frequency of reports will increase. It can quickly provide a quicker analysis of changes and their impact on capital management and profitability matrices. Enhancing value for insurers Insurers are increasingly looking to use data science techniques in the actuarial domain. Today, actuaries can access more data to work with and more information about people and society than ever before. The use of non-traditional data sources like social media, wearable devices, POS scanners, drones, etc., will play a dominant role in setting real-time assumptions, thereby increasing the granularity and

frequency of reporting. The robust techniques will provide a suitable data architecture for seamless and on-the-call reporting. Wipro is committed to providing high-quality business solutions and consultancy services, coupled with proven cutting-edge, data science expertise to bring transformational change that can solve the challenges that this confluence poses. Our narrative focuses on strengthening your delivery excellence, designing value creation models, and lowering your Capex significantly. For details, connect with our experts here. Reference: IFOA Data Science Committee, John Ng Modular Framework of Machine Learning (2020) Industry: Anirudh Bhattacharjee Practice Leader- Actuarial Services, Digital Operations, and Platform- Insurance, Wipro Anirudh leads the Actuarial services practice for the insurance vertical in DOP. He has more than 17 years of experience in Actuarial Valuation, Risk Management, Modelling and Reporting including, regulatory and shareholders spanning across geographies like US, UK, and Asia. In his free time, he likes to analyze handwriting styles. Despite the long-standing history of private pension plans, superannuation was introduced to Australians over 20 years ago to help them support their retirement in a financially viable way. Fast forward to 2020; it is now a A\$3T business. Over the last two decades, superannuation has become complex, highly regulated, and vulnerable to scandals. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just neglected www.wipro.com/blogs/michelle-stolting/ ---- Contact Wipro Blogs By Author Transforming your operational workstreams? Don't forget change management! Are you ready for a transformation? How to tackle a big transformational Ouote-to-Cash programme Extend the magic by connecting CPQ and B2B Commerce Cloud Why data quality is key in any Quote-to-Cash programme Delivering a cohesive omnichannel B2B sales operation with Revenue Cloud Please fill the required details to access the content Michelle Stolting Michelle Stolting EMEA Practice Director - Revenue Practice, Wipro Michelle Stolting leads the EMEA Revenue Practice at Wipro, the world's fourth-largest IT services provider. She is an experienced and driven operations and advisory professional with 6+ years of international work experience and a demonstrated history of working in the technology industry. She is passionate about change and business transformation, specifically around lead to revenue processes (CPQ and Billing). Outside of work, she is taking care of two cats and is passionate about rock climbing and yoga. Transformation is high on everyone's agenda these days, companies are busy preparing their organisation for the future. "If I had 8 hours to chop down a tree, I would spend 6 hours sharpening my axe," Abraham Lincoln is often quoted as saying. Implementing Quote-to-Cash (QTC) programmes may seem like a daunting task. In these difficult economic times, businesses are looking for ways to improve efficiency and reduce the cost of doing business. Data is undervalued and underrated. Even though every company wants to be data-driven, many are not aware of the quality their data holds and of the impact it may have on business decisions. From my experience in Quote-to-Cash (QTC) programmes, I can safely say that data quality is key to a successful transformation.

# Delivering a cohesive omnichannel B2B sales operation with Revenue Cloud

----- Arcticle source ----- https://www.wipro.com/blogs/michelle-stolting/ delivering-a-cohesive-omnichannel-b2b-sales-operation-with-revenue-cloud/ ---- About the Author Contact Wipro Related Blogs Cloud Economics: Driving Business Value Through Discipline De-Risking Mainframe Modernization for the Banking Industry The Day After: De-risking Legacy Modernization Please fill the required details to access the content Delivering a cohesive omnichannel B2B sales operation with Revenue Cloud June | 2021 Omnichannel sales has been a buzzword for guite some time now. While it is being talked about a lot in the trade press, the actual realisation of an omnichannel sales operation is quite a different ball game. There was a huge gap between the theory and making it work in the real world. This gap is now being addressed by Salesforce's Revenue Cloud. Customers want it fast and easy The advent of omnichannel sales in B2B is no doubt accelerated because of the current health crisis, but its success has been in the making for a long time. Rising customer expectations has been one of the drivers here. The B2C experience that we are used to in our personal lives has very much driven some of the demands in B2B. Just like modern consumers, B2B buyers want flexibility in product selection, in payment terms,... in short, a frictionless experience. When browsing a product catalogue and some help is needed, they want to be able to press a button and request a quote. And when a sales rep reaches out, they want that person to be equipped with the right context to provide guidance. And above all: they want it fast! If they need a quote, they want it now. If they have a question about an invoice, they want the answer straight away. And if they want to change a contract, they expect a fast transaction. Raising the bar even further, B2B buyers expect responsiveness and accuracy across different channels, whether they are buying directly or through a partner. Blocking factors for customer experience Two elements are making it difficult to comply with these customer demands: lack of scalability and the availability of data. Through a lack of automation of all tasks, some manual tasks are quite labour intensive. Just think of the firefighting that goes on in many organisations, chasing down errors on sales orders, reconciling data to send out accurate invoices, etc. Manual processes don't scale very well. Having multiple data tools may be even more detrimental to customer experience and efficiency than manual work. Management of product and pricing data is difficult enough as it is, even if you have them in just one place. But when you maintain master data in multiple tools to service different sales channels, that's when things really get out of hand. The opportunity for error is much higher and the ability to provide a consistent customer response is greatly reduced. Obviously, the ideal scenario is having a single source updating master data in one place. Revenue Cloud is the

solution to the data challenge That place is what we call Revenue Cloud. Revenue Cloud is a dedicated cloud from Salesforce that encompasses all processes that sit between CRM and the back-office ERP system. Revenue Cloud delivers all the capabilities that we have in allied products such as Configure Quote Price (CPQ), Billing and B2B Commerce and CPQ B2B Commerce Cloud Connector. Revenue Cloud is the solution to the data challenge that I just outlined: it creates a unique place for all data. For optimal customer experience, having purchases and customer interaction data together in one place is really important. Collecting and processing real-time data on customer purchasing behaviour is key to delivering the superior experience that B2B customers have come to expect. Any industry can benefit from these connected capabilities: Connecting the CPQ engine with the B2B commerce environment is key in making this happen, thanks to the synchronisation of product and pricing data and by synchronising purchase history. Equally important is the ability for customers to request quotes from the system, without requiring intervention from a sales rep. The customer is helped in this process by having a centralised visibility into purchase history, which greatly facilitates reorders. There is no doubt that omnichannel will only become more important in combining customer experience with revenue growth and operational efficiency. The barriers that were preventing companies from realising that goal have finally been removed by Revenue Cloud. Industry: Michelle Stolting EMEA Practice Director - Revenue Practice, Wipro Michelle Stolting leads the EMEA Revenue Practice at Wipro, the world's fourth-largest IT services provider. She is an experienced and driven operations and advisory professional with 6+ years of international work experience and a demonstrated history of working in the technology industry. She is passionate about change and business transformation, specifically around lead to revenue processes (CPQ and Billing). Outside of work, she is taking care of two cats and is passionate about rock climbing and yoga. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business 

### Why data quality is key in any Quote-to-Cash programme

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Through Discipline De-Risking Mainframe Modernization for the Banking Industry The Day After: De-risking Legacy Modernization Please fill the required details to access the content Why data quality is key in any Quoteto-Cash programme June | 2021 Data is undervalued and underrated. Even though every company wants to be data-driven, many are not aware of the quality their data holds and of the impact it may have on business decisions. From my experience in Quote-to-Cash (QTC) programmes, I can safely say that data quality is key to a successful transformation. Before we engage in a QTC programme, we usually propose an organisational readiness assessment. This assessment detects the gaps that need to be addressed in order to make the programme a success. The assessment looks at roadmaps and workstreams, business unit alignment, change management experience, ... The gap that never fails to present itself is the lack of clean data. Allow me to share some insights on why data quality is so crucial. Better for business Clean data holds a lot of advantages: it is only natural that clean data will lead to better reporting, hence better decision-making. It can also prevent loss of margin and revenue: when the data is correct, it is much easier to get insights and track everything that is happening. Bad data may lead to contracts not being fulfilled, or contract renewals being forgotten. Clean data also leads to better collaboration, because people will know exactly where to find what information. This makes it easier to bring in a colleague during vacation or sickness since it is very simple to tell the coworker where to get the data from and how to use it. Better for user adoption User adoption is critical for any new programme, and even more so when data is involved. Data entry is very often a manual process, thus prone to errors. How can a company expect users to be careful when keying in data if the user knows that the bulk of the data is garbage, making accurate reporting impossible? If all other data is clean and you are the only one entering rubbish, people are more inclined to make an effort. Fortunately, systems can help and enforce data hygiene, for instance by only accepting valid email addresses in an email field. Better integration after mergers When two or more companies merge, this affords an opportunity to start with a clean slate. Companies have to grab that chance to sift through the data and keep only what is current and valid. The worst thing a company can do is 'lift & shift' the legacy data to a new system. Maybe there is garbage in there that is 10 years old and no longer valid or there are duplicates that will make the life of the users harder, decreasing adoption to the new system. Anything that potentially excites the users, you want to look into. Better flow of a programme While it is not necessary that all data be cleansed at the start of the design-and-build phase, user acceptance testing should not start without at least having the basic information in the new system. If you have a Quote to Cash programme, you will always need a base layer of data such as account, contact, opportunity, subscriptions, contracts, renewals, products, prices,... You need at least these for a system test to be valid. Extra information for customisations or other requirements may come in a later phase. In our experience, it's best to sit down once, clean everything and be done with it. There are always dependencies that you perhaps only find out about when it is too late. And that may extend the programme timeline - and the budget. Taking care of data quality is really a mindset. A data-driven company will always start with the data. Cleansing data is a dirty job, but someone has to do it. At Wipro, we make this task a bit easier by offering data advisory services and

providing proven templates; these make sure that only the right data gets migrated to the new system. Data is precious and deserves your full attention. Industry: Michelle Stolting EMEA Practice Director - Revenue Practice, Wipro Michelle Stolting leads the EMEA Revenue Practice at Wipro, the world's fourth-largest IT services provider. She is an experienced and driven operations and advisory professional with 6+ years of international work experience and a demonstrated history of working in the technology industry. She is passionate about change and business transformation, specifically around lead to revenue processes (CPQ and Billing). Outside of work, she is taking care of two cats and is passionate about rock climbing and yoga. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business 

### Extend the magic by connecting CPQ and B2B Commerce Cloud

---- Arcticle source ---- https://www.wipro.com/blogs/michelle-stolting/ extend-the-magic-by-connecting-cpg-and-b2b-commerce-cloud/ ---- About the Author Contact Wipro Related Blogs Cloud Economics: Driving Business Value Through Discipline De-Risking Mainframe Modernization for the Banking Industry The Day After: De-risking Legacy Modernization Please fill the required details to access the content Extend the magic by connecting CPQ and B2B Commerce Cloud June | 2021 In these difficult economic times, businesses are looking for ways to improve efficiency and reduce the cost of doing business. More than ever, efficiency and profitability are going hand in hand and organisations are seeing the benefits of automating and streamlining business processes to the max. Adding more processes to an already automated chain, further revs up the speed of processing. And that is exactly what CPO B2B Commerce Cloud Connector does. While every business and organisation is different, we keep hearing these recurring themes from our customers and prospects: These are complex challenges that require a strategic vision and adequate tooling. CPQ B2B Commerce Cloud Connector rises to the challenge, by providing the missing link between two Salesforce clouds: B2B Commerce Cloud and CPQ & Billing. These are two great products for B2B buying and selling. CPQ & Billing is great for complex direct and indirect sales (direct selling, internal quoting, cross, up-sell, renewal, recurring subscription, manage opportunities, replace spreadsheets,...), while B2B Commerce Cloud is a perfect fit for

high-volume online transactions (online selling, self-service, online carts, multiple payment types, simple reorder, online catalogue browsing, split shipments,...). Each of them already automates a series of processes. By linking these two chains together, organisations can extend the magic and go for straight-through processing, eliminating manual interventions as much as possible. By connecting these two clouds, businesses can synchronise products, pricing, quote requests and order history across both clouds. B2B buyers... B2B commerce has changed a great deal over the years, and B2B buyers expect the same convenience and customer experience from a B2B commerce system as they get in their personal lives from the large B2C commerce sites. Whether they are one-time buyers of a product or a partner that buys regularly, B2B buyers require easy access to product and pricing information, and a seamless end-to-end experience. And that's what B2B Commerce Cloud delivers. ... and sellers On the sales side, organisations are looking to automate the quote-to-cash process as much as possible, thus creating a single source of truth. Besides eliminating loopholes in the sales process, it enables cross-selling and upselling and faster revenue intake. CPQ (Configure, Price, Quote) is a key building block in streamlining the quote-to-cash process. CPQ B2B Commerce Cloud Connector advantages CPQ B2B Commerce Cloud Connector creates a winwin situation for both the B2B customer and the vendor. The customer experience is enhanced by getting comprehensive information and receiving customised quotes faster. Vendors can improve their master data management and further streamline their processes. Industry: Michelle Stolting EMEA Practice Director - Revenue Practice, Wipro Michelle Stolting leads the EMEA Revenue Practice at Wipro, the world's fourthlargest IT services provider. She is an experienced and driven operations and advisory professional with 6+ years of international work experience and a demonstrated history of working in the technology industry. She is passionate about change and business transformation, specifically around lead to revenue processes (CPQ and Billing). Outside of work, she is taking care of two cats and is passionate about rock climbing and yoga. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business benefits that come with them.

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### Are you ready for a transformation?

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Finance, Operations and Legal. Each business unit will have a different result they want to achieve. Sales will want to increase its effectiveness and spend less time on creating proposals. Finance will want to make sure that no invoices or payments fall between the cracks. Yet despite these different expectations, it is necessary that each department knows what the impact of its actions are on other business units. The systems and processes need to be aligned to make this work, and each department needs to know where their responsibilities start and end, and where the handover to other departments lies. Are you aligned on change management? A transformational project has a huge impact on the whole company, so it is essential to ensure that everyone is on the same page. Transforming without effective change management and change communication is prone to failure. Before starting on a project, it is important to know if an organisation has experience with change management through similar projects and what lessons learned can be applied to the new project. This part of the readiness assessment also thinks about what training may be needed, what the impact of the project is on staffing (does the company need more people, or do positions become redundant?), what communication channels are available and who will drive communication. What gaps exist and how can we address them? The readiness assessment will usually find several gaps that need to be filled before the project can start. Experience shows us these gaps are different in size and origin from one organisation to the next, but most of the time we find gaps in the same areas: Sometimes skill sets are missing, there is a lack of customer focus, there is no clear vision on the processes that will be automated, there is no proper documentation, or data sets are not clean enough before they are migrated. Many of these gaps can be addressed in the advisory-led design phase so that the project can go ahead as planned and need not be delayed. An organisational readiness assessment gives a company new insights on their strengths and weaknesses. But, above all, it's a key factor in delivering a QTC project successfully. Interested in finding out more? Let me know. Industry: Michelle Stolting EMEA Practice Director - Revenue Practice, Wipro Michelle Stolting leads the EMEA Revenue Practice at Wipro, the world's fourth-largest IT services provider. She is an experienced and driven operations and advisory professional with 6+ years of international work experience and a demonstrated history of working in the technology industry. She is passionate about change and business transformation, specifically around lead to revenue processes (CPQ and Billing). Outside of work, she is taking care of two cats and is passionate about rock climbing and voga. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business benefits that come with them.

#### How to tackle a big transformational Quote-to-Cash programme

----- Arcticle source ----- https://www.wipro.com/blogs/michelle-stolting/howto-tackle-a-big-transformational-quote-to-cash-programme/ ---- About the Author Contact Wipro Related Blogs Cloud Economics: Driving Business Value Through Discipline De-Risking Mainframe Modernization for the Banking Industry The Day After: De-risking Legacy Modernization Please fill the required details to access the content How to tackle a big transformational Quote-to-Cash programme June | 2021 Implementing Quote-to-Cash (QTC) programmes may seem like a daunting task. It's a transversal exercise that multiple divisions must engage in. Over the course of the many QTC programmes that we have delivered, we have learned valuable lessons. Taking heed of these best practices leads not only to successful programmes, it also gives peace of mind to all key stakeholders involved. Quote-to-Cash is an umbrella term for the commercial processes of a company. QTC tackles the whole business cycle from the moment a prospect turns into an opportunity up to the moment a sale has been closed, products or services have been delivered, payment for these products or services has been received and the revenue is recognised. Marketing, Sales, Operations, Purchasing, Finance,... all these departments need to have their say in the programme. This requires tight programme management, buy-in from executive sponsors. And above all, the right questions need to be asked. 1. Are we ready? Inside a large company, not all departments have the same level of maturity. From past programmes, we have learned that OTC programmes are most successful when the entire organisation is ready for a programme that transforms business processes and marries these processes with technology. The best way to tackle this is with an organisational readiness assessment. By studying the roadmap, understanding goals and strategies, setting milestones and knowing what return on investment is expected, you can identify the gaps and estimate what skills need to be developed. It is key to eliminate the disconnect between different departments before the programme starts. 2. Can we simplify? Many companies start out with a simple product offering and one business model. But as the company grows, products and services are added, solutions bundled, acquisitions made, sales channels added, and deals become more complex. Along the way, the support systems that were built, are adapted to reflect the growing complexity and new software packages are added for point solutions. Before you know it, you are working with disparate systems that are poorly governed. A key question to be asked before the implementation kicks off is investigating how processes can be simplified. Processes may have been created on the fly to cope with a specific problem, but do not connect with other procedures. When starting a QTC programme, reviewing/validating all processes and eliminating unnecessary steps will not only benefit the efficiency of an organisation, but will also simplify the entire programme. 3. Can we divide the programme

into phases? Quote-to-Cash is a major transformation and it is advised not to do the entire programme in one big bang. During the discovery/scoping phase, it is good to assess if the programme can be chopped up into different phases. For every company, this can be different. A logical split is to view Configuration, Pricing and Quoting (CPQ) and Billing as separate streams. Another option is to tackle one region at a time or to start with the region that has the most complex processes and then apply the learnings from that pilot to the remaining roll-outs. 4. Is our data clean? Data is the beating heart of any company, so it's vital to ensure that all existing data is correct before migrating it to a new system. Data cleansing is an important subject and one that is usually underestimated or overlooked. 5. Can we continue 'business as usual'? However invasive a QTC programme is, it should not prevent the company from keeping the business running as usual. It is imperative that a company can continue to operate as normal until everything is migrated to the new system. Whether you are bringing in a new billing system or not, you are still invoicing to customers. The business should not stall and a QTC programme should have no impact at all on the relationship with your customers. 6. How do we communicate to the users? End-users know that their way of working will be impacted/different when a transformation takes place. So it is important to start communicating early on and get all stakeholders on side and involved. A good way to keep them informed throughout the programme is to release bits of information at different stages so they know what is coming. A QTC programme brings huge advantages to most users. Most people don't like to do manual interventions, so automating these tedious tasks will be seen as a positive. By training people, you can also generate excitement around the programme that will help people accept the change more readily. 7. How do we manage our implementation partner? During a QTC implementation, your consulting partner becomes an extension of your team. It is essential to keep communication lines open between the customer and the systems integrator. We advise you to have daily stand-ups and lots of open discussions, where both parties make themselves available as much as possible to answer questions and tackle small hurdles before they turn into big problems. With more people working remotely or from home, it's even more important to take an open approach to collaborate with your integrator. Being able to manage the customer revenue cycle in one system through QTC brings organisations a number of benefits. It helps them make money and save money. Because of its transformational impact on a business, it is key to prepare well and have all the important questions answered and boxes checked before embarking on the transformation. As the saving goes: by failing to prepare, you are preparing to fail. Industry: Michelle Stolting EMEA Practice Director - Revenue Practice, Wipro Michelle Stolting leads the EMEA Revenue Practice at Wipro, the world's fourth-largest IT services provider. She is an experienced and driven operations and advisory professional with 6+ years of international work experience and a demonstrated history of working in the technology industry. She is passionate about change and business transformation, specifically around lead to revenue processes (CPQ and Billing). Outside of work, she is taking care of two cats and is passionate about rock climbing and yoga. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy.

Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem – the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business benefits that come with them.

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# Transforming your operational workstreams? Don't forget change management!

----- Arcticle source ----- https://www.wipro.com/blogs/michelle-stolting/ transforming-your-operational-workstreams-dont-forget-changemanagement/ ---- About the Author Contact Wipro Related Blogs Cloud Economics: Driving Business Value Through Discipline De-Risking Mainframe Modernization for the Banking Industry The Day After: Derisking Legacy Modernization Please fill the required details to access the content Transforming your operational workstreams? Don't forget change management! June | 2021 Transformation is high on everyone's agenda these days, companies are busy preparing their organisation for the future. This entails digitising their products and services, streamlining internal processes, automating to the max and optimising their cost structure. From our experience in Quote-to-Cash programmes, we have seen that change management is key in making these transformations successful. Transforming without effective communication is prone to failure. Allow us to share some tips on how to ensure the transformation does work. Resistance to change is inherent in most human beings, we don't want the normal order to be disturbed, so it takes guite an effort to have an entire organisation change direction. When a company engages in a Quote-to-Cash programme, hardly any department can escape this change. Sales, Marketing, Operations, Finance,... they will all have to adapt their behaviour to new processes and tools. International research shows that 60% to 70% of organisational change programmes fail. Obviously, statistics, like these, are a danger to any transformation programme. But let's balance that with a positive statistic, 81% of programmes with good change management come in under budget. Based on our experience, what can you do to tackle change management the right way? 1. Set a strategy and prepare well Here's another statistic, only 20% of companies overcome a lack of transformational strategy. So it's imperative to set the right strategy for your transformation and change management. When you embark on a transformational programme, set a clear vision for the entire organisation and analyse the impact the change will have on the company. This change impact analysis allows you to define where you will need to direct most of your communication efforts in the programme. Just as indispensable is

identifying the stakeholders (so you know how to align them) and assessing the skills gaps (so you can offer the right training to the people impacted). In a Quote-to-Cash programme, you will zoom in on the entire process, from scoping the programme to improving the adoption rate, and focus on how it will disrupt people's usual way of working. 2. Designate a change leader Change ambassadors have a huge impact, the higher the position of your change leader, the bigger your chance of success. Almost half of the change programmes that have the CEO as an executive sponsor of the programme. succeed. For this role, you will need a bridge-builder, who can seek sponsorship in all different departments. A Quote-to-Cash programme impacts many people throughout the organisation. It's best if you find a more neutral figure like the CEO to make sure that all friction between departments is handled properly. 3. Embed change into the programme Change management is not a separate programme, it needs to happen simultaneously with your Quote-to-Cash transformation. Change management is a long process that starts as soon as you start planning your transformational programme, and it only ends when the programme has been deployed and starts showing tangible results. Change management occurs at the right roles and at the right time. So just like any other programme, you will first plan the change, then analyse the change and finally implement it. During the implementation phase, you will execute the reorganisation and take care of upskilling the employees that are taking on a new role. By implementing change management every step along the way, it will come as a natural part of the entire transformation, not as a separate programme that is bolted onto the transformation. This way, you will continue to generate excitement in the organisation, celebrating quick wins to keep everyone motivated. 4. Measure the results Just as important as measuring the results of the overall transformation, is measuring how effective your change management was. After all, change management comes at a cost - even if you execute it through your own staff - so you will obviously assess its return on investment (ROI). Measuring the impact of your change efforts can, for instance, be done through surveys that validate the KPIs you set at the beginning of the programme. Measuring results is not only important for your current programme, but circulating the positive results makes it easier to invest in change management for any new programme coming along. 5. Seek outside help Many organisations have a dedicated change management team, but when this is not the case, change management is something that can be contracted out as well. Often it makes sense to bring in outsiders to assist in change management exercises. As an outsider, for example, it is sometimes easier to assess how ripe the organisation is for change, what gaps need to be filled to get to the readiness that is required, etc. At Wipro, change management is part of our Advisory offering and we have developed a comprehensive set of services that apply change management to any Quote-to-Cash or other transformational programme. Digital transformation is not an incremental change, it brings a fundamentally different way of working for an entire organisation, and often even a change in company culture at tactical level. As market research analyst firm Gartner puts it: "The secret to digital, is analogue." In other words: people. Changing company culture without taking the human psyche into consideration is organisational suicide. Implementing Quote-to-Cash is a transversal operation with implications for the entire company. All the more reason to bet big on change management

to augment its success. Industry: Michelle Stolting EMEA Practice Director - Revenue Practice, Wipro Michelle Stolting leads the EMEA Revenue Practice at Wipro, the world's fourth-largest IT services provider. She is an experienced and driven operations and advisory professional with 6+ years of international work experience and a demonstrated history of working in the technology industry. She is passionate about change and business transformation, specifically around lead to revenue processes (CPQ and Billing). Outside of work, she is taking care of two cats and is passionate about rock climbing and yoga. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business Arcticle source ---- https://www.wipro.com/blogs/thomas-dorby/ ---- Contact Wipro Blogs By Author Close collaboration across the value chain, both up and down stream Please fill the required details to access the content Thomas Dorby Thomas Dorby Nordics Manufacturing & Consumer Goods Practice Lead, Wipro Thomas leads the Manufacturing & Consumer Goods Practice in the Nordics providing industry vertical experience and insights allowing customers to connect strategic ambitions and challenges to the right digital solution and transformation. Having spent more than 17 years in retail, manufacturing and high tech in roles driving strategic sales development, commercial excellence and sales operations - he has thorough insights into the overall strategic challenges, best practices and trends in the industry. John slowly counts all the open applications and tabs on his computer. His heart sinks. Does he really need all these data sources to renegotiate the contract with Constructibuild? John is a key account executive at a leading manufacturer of cabling components, and his main customer has asked him to renew their annual contract. And can he please come up with a very competitive price, taking into account all last year's orders - both the run rate orders and the one-off orders for specific building 

## Close collaboration across the value chain, both up and down stream

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2021 John slowly counts all the open applications and tabs on his computer. His heart sinks. Does he really need all these data sources to renegotiate the contract with Constructibuild? John is a key account executive at a leading manufacturer of cabling components, and his main customer has asked him to renew their annual contract. And can he please come up with a very competitive price, taking into account all last year's orders - both the run rate orders and the one-off orders for specific building projects. This should be a straightforward enough exercise: review last year's framework agreement, check the actuals, make an estimate for the new year and see what rebates apply. In reality, it is much more complicated. John has no idea what last year's actuals were, unless he consults multiple data sources. Does this sound familiar? In all too many companies, information is scattered across disparate systems and getting a single source of truth is hard. How did it come this far? Let's take a look at some of the factors that have changed manufacturing and that have contributed to the complexity of insights and reporting. Manufacturing has changed dramatically The fourth industrial revolution, in which data became the single biggest asset, has changed things for any company working in manufacturing. For starters, production companies have suddenly come eye to eye with customers. Traditionally, the customer was a far-away concept, shielded by a sales chain of distributors and resellers. Digitisation in general and ecommerce in particular, have brought manufacturers and customers closer to each other. These consumers now expect the same customer experience from these traditional manufacturers as the service they get from new players like Amazon or Alibaba. These ecommerce giants are offering new products and competing products at lower prices, but especially with better service. Thirdly, the clock speed of markets is so fast that long-term planning is out of the question. This makes it harder to predict batch sizes and margins. Integration across the value chain With so many changes going on, automation is key. Unfortunately, different parts of the supply chain, sales processes and production planning have been automated separately and are not connected seamlessly. Having a close collaboration across the value chain holds many advantages, both upstream (between customers and Sales) and downstream (between Sales and Production). Upstream: Downstream: Information at everyone's fingertips Do the advantages above seem like a delusion? Salesforce Manufacturing Cloud makes this dream come true, with features such as management of sales and / or framework agreements, account-based forecasting, all the way down to the individual product, account-based targeting for easy follow up and full insights to overall performance and action setting to all involved, plus add-ons such as community portal for partners and Einstein analytics. Account-based forecasting allows Sales to use its own formulas to calculate forecasts, based on orders, opportunities and sales agreements. Sales managers can use these forecasts to understand what products perform best and can decide which customer account(s) managers need to focus on, to drive sales. These insights can also form the basis to set measurable targets for account managers. When changes happen after the forecast has been set it is easy for the account manager to change the forecast, thus overwriting the originally calculated forecast. By incorporating Community Cloud for Partners into Manufacturing Cloud, the real-time visibility and collaboration tools in Manufacturing Cloud can be extended to customers and channel partners. This will reduce the latency in the planning process. What's more:

this will also improve the overall accuracy of sales forecasts. While adding Manufacturing Cloud as an extension to Sales Cloud will already lead to more visibility and transparency in the value chain, the Einstein Analytics add-on provides many more insights straight out of the box. Einstein Analytic is the Artificial Intelligence engine of Salesforce and when added to Manufacturing Cloud comes with between 50 and 60 pre-built Einstein dashboards. This eliminates the need to develop custom reports. Making custom reports is time-consuming and can eat up to 40% of a project's total budget. Having these intelligent dashboards makes it easy to take informed decisions. Manufacturing Cloud provides all actors in the value chain with information at their fingertips. Having information at your fingertips has been a given for the last few decades, however the key in the manufacturing industry is having the same information at everyone's fingertips. That is one of the main key elements of the added value derived from implementing Manufacturing Cloud. Industry: Thomas Dorby Nordics Manufacturing & Consumer Goods Practice Lead, Wipro Thomas leads the Manufacturing & Consumer Goods Practice in the Nordics providing industry vertical experience and insights allowing customers to connect strategic ambitions and challenges to the right digital solution and transformation. Having spent more than 17 years in retail, manufacturing and high tech in roles driving strategic sales development, commercial excellence and sales operations he has thorough insights into the overall strategic challenges, best practices and trends in the industry. Richard Henry Senior Management Consultant, Wipro Richard provides Wipro customers with industry vertical expertise within manufacturing & distribution having spent over 30 years working in both B2B & B2C with brands such as DuPont, GE, Group Rocher SA, Wolseley PLC, Wilko, Rexel SA & Howdens PLC. He has held positions as diverse as Chief Operating Officer, IT Director, E-Commerce Director and Multi-Channel Director / Digital Director. He has spent the last 15 years creating, delivering & owning digital transformation within organisations Arcticle source ---- https://www.wipro.com/blogs/richard-henry/ ---- Contact Wipro Blogs By Author Manufacturing: only the customer-centric will survive Four ways for manufacturers to transform their digital marketing Growing sales and breaking down the silos in manufacturing How a Centre of Excellence increases software ROI Partner Automation is Key to Maximizing the Manufacturing Ecosystem Three Ways to Optimize the Supply Chain to Become Customer Centric Five ways manufacturing companies can boost profitability Please fill the required details to access the content Richard Henry Richard Henry Senior Management Consultant, Wipro Richard provides Wipro customers with industry vertical expertise within manufacturing & distribution having spent over 30 years working in both B2B & B2C with brands such as DuPont, GE, Group Rocher SA, Wolseley PLC, Wilko, Rexel SA & Howdens PLC. He has held positions as diverse as Chief Operating Officer, IT Director, E-Commerce Director and Multi-Channel Director / Digital Director. He has spent the last 15 years creating, delivering & owning digital transformation within organisations mostly with P&L responsibilities. It's early December and John is relaxing at the end of a hard day's work. Even though a smooth 'Go Live' is a moment of huge relief for a project team that has worked tirelessly to make it a success Manufacturers were once many steps removed from their customers, with wholesalers and distributors providing a crucial link to sales. With the

titanic shift that has occurred in business, only customer-centric companies will survive. Manufacturing companies are under pressure. Cost of raw materials is rising, while increased competition is driving down end user pricing. Salaries are rising at a level that manufacturing automation alone cannot absorb and the race to acquire talent is increasing. This forces manufacturing companies to find other ways of boosting profitability.

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### Five ways manufacturing companies can boost profitability

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analyse this data and deliver user-friendly reports to assist better decision making. Spend your marketing budget wisely Manufacturing has never been known as a big marketing spender, but fortunately, this is slowly changing, and manufacturing is catching up with other industries in terms of marketing spend vs overall revenue. And no surprise: the manufacturing industry is spending more on digital marketing, especially as traditional B2B marketing tactics such as trade shows and other industry events have been cancelled because of the pandemic. This is helping marketers in manufacturing organisations move from being product marketers to customer focused marketers. Marketing automation allows manufacturing companies to get the best results for their budget. Tools like Pardot and Marketing Cloud help manufacturers market and sell smarter. Based on customer insights, marketing can craft the right message and send it at the right time to the right prospect. By mapping out the customer journey, marketing messages can be personalised, making the marketing process more effective. Marketing analytics will show what campaigns are most successful in influencing sales and will help identify the most valuable leads. Forecast accurately With the rising cost of raw materials and the need to service demanding customers quickly, maintaining the right inventory levels is key for manufacturers. While it may be convenient to maintain a large inventory, it is also eating working capital. Accurately forecasting customer demand is crucial in striking the right balance. Manufacturing Cloud provides everyone in the organisation with an accurate 360 view on both customer activity and product performance. Thanks to Sales Agreements, it is possible to unify run-rate business with ERP data as well as one-off opportunity purchases thus providing a complete picture of the total order book. Order management systems can be unified with negotiated contract terms. Increase external collaboration Can you read a customer's mind? Just imagine if it was possible to predict when a customer will order what product, and what changes the customer might want to make to a run-rate contract. By extending the automation of a value chain to the customer (or to the partner selling to the end customer) orders can be entered more efficiently, and production processes can be adapted to the most recent information. This is now made possible thanks to tools such as Community Cloud and the CPQ B2B Commerce Cloud Connector. This creates a win-win situation for customers and manufacturers: customers can quickly get offers and place orders automatically, and manufacturers can integrate customer demands into their streamlined processes easily. Applying automation and technology to core processes provides a fast track to increasing profitability in manufacturing. To find out more about the benefits of digital transformation in manufacturing, get in contact with us. Industry: Richard Henry Senior Management Consultant, Wipro Richard provides Wipro customers with industry vertical expertise within manufacturing & distribution having spent over 30 years working in both B2B & B2C with brands such as DuPont, GE, Group Rocher SA, Wolseley PLC, Wilko, Rexel SA & Howdens PLC. He has held positions as diverse as Chief Operating Officer, IT Director, E-Commerce Director and Multi-Channel Director / Digital Director. He has spent the last 15 years creating, delivering & owning digital transformation within organisations mostly with P&L responsibilities. Manufacturers were once many steps removed from their customers, with wholesalers and distributors providing a crucial link to sales. With the titanic shift that has occurred in business, only customer-

### How a Centre of Excellence increases software ROI

----- Arcticle source ----- https://www.wipro.com/blogs/richard-henry/how-acentre-of-excellence-increases-software-roi/ ---- Contact Wipro Related Blogs Cloud Economics: Driving Business Value Through Discipline De-Risking Mainframe Modernization for the Banking Industry The Day After: Derisking Legacy Modernization Please fill the required details to access the content How a Centre of Excellence increases software ROI July | 2021 Even though a smooth 'Go Live' is a moment of huge relief for a project team that has worked tirelessly to make it a success, for the business itself, the actual work to make a project succeed has only just started. The business goals that the software was installed for are in constant flux, processes are changing, and user adoption needs to be constantly monitored and managed. Fortunately, there is a way to give your software implementation a 'long tail' and crank up the Return on Investment (ROI) of your software: a Centre of Excellence (CoE). What I discuss today is far from a theoretical lecture on the mechanics of a CoE, but rather some key practical lessons I've learnt while working with businesses of all sizes and across all industries. Deploying new software is an important moment in the life of an organisation, especially if you are dealing with software that changes people's way of working, such as Contract Lifecycle Management (CLM) for instance. Users need time to grow accustomed to the new solution, even if the tool makes their lives more comfortable. Sometimes users are more interested in seeing how they can bend the new software to their familiar way of working than in using it the intended way. One way of preventing this, is to ensure that all users are not only continuously well trained and suitably skilled, but also understand what specific benefits the program can bring, the famous "what's in it for me?". Besides that, users need to feel heard by creating a platform that allows the business to share feedback on their day-to-day use of the solution. Allowing this through a CoE will extend the lifecycle of software and dramatically increase its ROI. What happens in a Centre of Excellence? A CoE is a committee of people who meet on a regular basis to discuss the software that is in use. They will monitor the effectiveness of the solution and discuss the future roadmap or the backlog of enhancement requests from the business. They will decide what requests are accepted or what strategic decisions concerning the solution should be made and will then prioritise them. In general, the CoE will investigate how they can further improve the software and will also drive adoption through training and onboarding. Who is represented in a Centre of Excellence?

There are several different ways a CoE can be set up, but a key principle is that a CoE should always consist of a mix of business and IT people. Business knows best what impact the software has on the company's results and how a tool is actually used. The business end is usually represented by 'super users' who know the software through and through and act as a sounding board for their colleagues. IT needs to be there to evaluate the overall fit in the IT infrastructure and what development effort - and budget - is needed and appropriate to implement change requests. Why involve an external partner in a Centre of Excellence? In the current IT marketplace, it is impossible for an IT department to keep up to speed and have in-house skills on all software the company has installed. All vendors have a roadmap and constantly update their software. No way that IT can stay on top of all that. Internal ownership of the CoE is important, but leveraging external expertise is key for a CoE's operation. Doing so, a company can assure themselves of deep expertise in the value of technology and a close connection to the software vendor. At Wipro we work with managed services contracts for CLM that include user adoption monitoring, training new users, first line support, dealing with change requests, keeping our customers informed on product roadmaps and designing how process- or product enhancements can benefit their business. Our close relationship with DocuSign and our deep expertise and experience in CLM customers give us valuable insights that every customer can benefit from. Isn't a Centre of Excellence just another cost item? There's no denying that the internal management and the external expertise are a cost factor in a CoE, but it is the value it produces and the risk it mitigates that needs to be evaluated. Done well, it is an investment well spent. It is no secret that IT projects more often fail than succeed. Companies often have to reimplement existing or new software because the legacy solution no longer performs or achieves the desired results. The majority of the projects I have come across are replacing something existing that no (longer) works. Believe me: overall, a re-implementation is a much bigger cost than a CoE. How do you measure the success of a Centre of Excellence? When an organisation introduces a new software solution, it has a certain goal in mind. Obviously, at Go Live, you will have not yet reached the goals you initially set. Going back to busy business as usual makes us forget why the investment was made in the first place. A first measure for a CoE is to further achieve and monitor those goals by constantly evaluating whether the desired results are effectively realised. On top of that, there are also metrics that you can use to measure the success of a CoE itself, for example user adoption. The CoE is a sounding board for users. Having a sounding board boosts enthusiasm to keep using software to the fullest. Setting up a CoE is not something you should be doing as an afterthought, or when you notice user attention is waning. As soon as an organisation embarks on a project, ensuring long-term ROI through a CoE should be considered as part of the scope and budget of that project. Industry: Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy

### Growing sales and breaking down the silos in manufacturing

----- Arcticle source ----- https://www.wipro.com/blogs/richard-henry/growingsales-and-breaking-down-the-silos-in-manufacturing/ ----- About the Author Contact Wipro Related Blogs Partner Automation is Key to Maximizing the Manufacturing Ecosystem Three Ways to Optimize the Supply Chain to Become Customer Centric Five ways manufacturing companies can boost profitability Please fill the required details to access the content Growing sales and breaking down the silos in manufacturing July | 2021 It's early December and John is relaxing at the end of a hard day's work. A key account executive at a manufacturer of cabling components, John is extremely pleased with some large contracts that he recently won. John's happiness is shattered when he gets an angry phone call from George, the project manager at building company Constructibuild, his biggest customer. Why on earth did John's company just deliver 100,000 components that he doesn't need? Didn't John take the necessary action when George called four months ago to say projects had been delayed and could John please hold off delivering the components until April? George will send the delivery back and refuses to pay the invoice. Does this fictitious story sound familiar? Unfortunately, stories like these are far too common in manufacturing, causing extra cost, harming customer/supplier relationships and making a company miss sales opportunities. And we all know from experience it can actually get far worse than that: in some cases, these 100,000 components will go back into the company's stock, waiting to be delivered in April. Other customers' orders for exactly the same product may be in backlog and this could even cause the company to buy new raw materials at an exorbitant cost because those customers need the components urgently. All the while, Constructibuild's 100,000 pieces are gathering dust in the warehouse. John is shocked when he gets the angry customer on the line. And he wonders what caused this fiasco. And how could he have prevented this from happening? And what tools could his company use to prevent this from happening again? Lack of forecasting and insight Since George signed the contract for 100,000 cable components, the order had made its way into the different systems that the manufacturer's divisions use: an ERP system, a couple of spreadsheets here and there. For each of the parties involved, the focus was on this one order. What they were overlooking was that about 40% of the total amount of cable components that the company ships quarterly is smaller orders - run-rate business. The one-off deals deserve a lot of attention, but it should not be at the expense of the run-rate business, typically representing a significant part of the business. In all too many companies, managing the run-rate business is a crucial, yet underprioritised activity because of a lack of proper tools. Managing the run-rate

business proactively means that you identify the under- or overperformance, thus affecting forecasting and supply chain requirements at an earlier stage. This will give Sales the opportunity to drive the business and the results much better. Just imagine John's company used a tool that looks at all orders for this particular component, both the run-rate business and the one-off opportunities? This would have triggered Sales to offer the 100,000 returned pieces to other prospective buyers, rather than having them sit idly in the warehouse. And who knows: John might have been the one selling them again, doubling his bonus! Lack of internal communication Many companies are siloed, and there is little connection between Sales, Operations, Supply Chain Management and Finance. When each department is working on its own island, focusing on their own activities, accidents are just waiting to happen. This situation gets worse when everyone is looking at different sources of information, as data is scattered over multiple data sources such as spreadsheets, an ERP system or other standalone systems. Every silo inside the company has their own priorities. Even if John had passed on the information regarding the delay, perhaps someone in Planning decided to ship the order anyway to optimise other processes or performance metrics, unaware of the consequences on the customer side. Besides which, Finance may have wanted to recognise the revenue this year, rather than next year. Just imagine if everyone in the company was working on the same data, getting reports based on this data, working to fulfil the same sales agreement... In the deal with Constructibuild, perhaps all departments have their reason to be happy because they reached t heir KPI. Perhaps even John, who gets his bonus based on fulfilment of the order. It is clear this will lead to this or similar situations happening again - and that will impact the company over time... Lack of external communication George called John to let him know about the change of plans. John promised to inform his colleagues, but perhaps he forgot. Or, except for email, he did not have a tool at his disposal to alert Operations Planning to the postponed order. Just imagine he did have such a tool, a portal perhaps that can be used by the customer, so that George could adapt the forecast, sending the information to the manufacturers' Sales & Operation Planning Department (S&OP). This would automatically update everyone involved in sales forecasting, production planning, purchasing and finance. When John received the angry call from George, he sure wished he had had a tool like that. Solving these S&OP challenges Summing up: to solve these problem statements, John's company needs a solution that improves communication both internally and with the customer, actually letting customers change forecasts themselves. The solution needs to act as a single source of truth for everyone involved in the process, ensure that the entire business process is streamlined and that it delivers insights into both the run-rate business and one-off opportunities. Impossible to build such a tool? Not at all, as that has been done already when Salesforce released its Manufacturing Cloud. Launched in the autumn of 2019, Manufacturing Cloud is a solution that helps manufacturers unify account planning and forecasting and allows greater transparency and collaboration across their entire supply chain ecosystem. This unified overview provides insights based on new sales agreements and an account-based forecasting solution that enable a manufacturer to accurately forecast and plan. This leads to more predictability and better business outcomes. Industry: Richard Henry Senior Management Consultant, Wipro Richard provides Wipro customers

with industry vertical expertise within manufacturing & distribution having spent over 30 years working in both B2B & B2C with brands such as DuPont, GE, Group Rocher SA, Wolseley PLC, Wilko, Rexel SA & Howdens PLC. He has held positions as diverse as Chief Operating Officer, IT Director, E-Commerce Director and Multi-Channel Director / Digital Director. He has spent the last 15 years creating, delivering & owning digital transformation within organisations mostly with P&L responsibilities. Manufacturers were once many steps removed from their customers, with wholesalers and distributors providing a crucial link to sales. With the titanic shift that has occurred in business, only customer-centric companies will survive. Manufacturing companies are under pressure. Cost of raw materials is rising, while increased competition is driving down end user pricing. Salaries are rising at a level that manufacturing automation alone cannot absorb and the race to acquire talent is increasing. This forces manufacturing companies to find other ways of boosting profitability.

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### Four ways for manufacturers to transform their digital marketing

----- Arcticle source ----- https://www.wipro.com/blogs/richard-henry/fourways-for-manufacturers-to-transform-their-digital-marketing/ ----- About the Author Contact Wipro Related Blogs Partner Automation is Key to Maximizing the Manufacturing Ecosystem Three Ways to Optimize the Supply Chain to Become Customer Centric Five ways manufacturing companies can boost profitability Please fill the required details to access the content Four ways for manufacturers to transform their digital marketing July | 2021 The manufacturing industry is not renowned for its great marketing, yet as consumption patterns and consumer expectations are changing, manufacturing will need to get a better grip on its marketing. For a long time, CEOs and CFOs in manufacturing saw marketing as nothing more than a cost centre that had no connection to the business. "Marketing has become the least fluffy part in the manufacturing business," said my colleague Richard Henry, during a recent conversation. I came away from the conversation with new insight on how manufacturers need to radically rethink the way they are marketing today. Think customer, not product Richard Henry has over 30 years' experience in manufacturing, having worked at various companies in operations, marketing, digital and IT. A lot has changed in that time and has forced the manufacturing industry to adapt. "Traditionally, manufacturers work back to front. Now they need to reverse that. Some of the buyers are millennials now," said Richard, "and they expect the same customer experience in B2B buying as they do in the B2C experiences in their personal lives. This ranges from finding product info on a website, to getting the order delivered and having visibility on the entire supply chain." Marketers in manufacturing were traditionally product marketers but are now forced to switch to customer marketing. "This is even more important now that many products are turning into services. In a few years' time for example we may no longer own cars, but simply get picked up by a different car every day, as automotive suppliers move to a service-

based model." Develop a vision To focus on the customer, you need to develop a vision. "In the nineties, we had less data to base our marketing on. It would sometimes take several months before we were able to analyse the results of a marketing campaign." Thanks to digitisation, that has changed, and marketers can now get feedback much faster. "Companies that used to do mail order have easily made the switch. This is because customer focus and data management have always been part of their DNA." Becoming customer focused means doing research to understand the customer journey. What content are prospects consuming? What channels do they use? How do they purchase? "The use of data in manufacturing traditionally relates to improving the internal operations. This feedback loop now also needs to be applied to data collected from customer behaviour," said Richard. Hire the right people To make the switch to customer centricity, manufacturing will need to attract new blood. "When you're graduating from university and have different work options, a job in manufacturing usually doesn't top the list," said Richard. "And the compensation and benefits that the industry pays, doesn't help either." Manufacturing needs marketers now who can perform research, analyse the data and adapt their marketing to cater to customer needs and behaviour. "Manufacturing could use a dose of innovation, for instance, by applying new technologies such as big data, artificial intelligence or using augmented reality to enhance the customer experience." Get yourself a single source of truth To put the customer first, we need pertinent, up-to-date data. "Manufacturing should focus on gathering data from their customers and incorporate that in a CRM system to get a 360 view on customers." While manufacturing companies have enormous amounts of data, especially with the advent of the Internet of Things, most of this data has an internal focus. "This also means that most of the data is buried in ERP systems or spreadsheets. In this day and age, many manufacturers still have most of their inventory management hidden in an Excel file, believe it or not. I would urge any manufacturing company to invest in a platform that holds all data on customers, on marketing, on billing,..." Successful manufacturers have a streamlined operation that starts with getting data from prospects and customers, and the right tools to support the business processes. To some companies, putting the customer first will be easier than for others. Component manufacturers that are a few steps removed from the end user, are having a hard time in adapting to customer centricity. They too will need to develop a vision, focus on customer experience, hire the right talent and acquire the right tooling. Industry: Richard Henry Senior Management Consultant, Wipro Richard provides Wipro customers with industry vertical expertise within manufacturing & distribution having spent over 30 years working in both B2B & B2C with brands such as DuPont, GE, Group Rocher SA, Wolseley PLC, Wilko, Rexel SA & Howdens PLC. He has held positions as diverse as Chief Operating Officer, IT Director, E-Commerce Director and Multi-Channel Director / Digital Director. He has spent the last 15 years creating, delivering & owning digital transformation within organisations mostly with P&L responsibilities. Thomas Dorby Nordics Manufacturing & Consumer Goods Practice Lead, Wipro Thomas leads the Manufacturing & Consumer Goods Practice in the Nordics providing industry vertical experience and insights allowing customers to connect strategic ambitions and challenges to the right digital solution and transformation. Having spent more than 17 years in retail, manufacturing and high tech in roles driving

### Manufacturing: only the customer-centric will survive

----- Arcticle source ----- https://www.wipro.com/blogs/richard-henry/ manufacturing-only-the-customer-centric-will-survive/ ---- About the Author Contact Wipro Related Blogs Partner Automation is Key to Maximizing the Manufacturing Ecosystem Three Ways to Optimize the Supply Chain to Become Customer Centric Five ways manufacturing companies can boost profitability Please fill the required details to access the content Manufacturing: only the customer-centric will survive When you think of pioneers in digitisation, manufacturing is usually not the first industry that comes to mind. Retail, banking, travel, media and entertainment were among the first to set up digital channels, digitise their internal processes and cater to the new needs of the demanding customer. Manufacturing companies were mainly focusing on improving their supply chain and workforce productivity. It's high time manufacturers also started taking a customer-centric approach. The way consumers are using digital in their daily lives has changed enormously over the last five to ten years, and even more so the last six months. Many industries have jumped on the digital bandwagon too. Airlines and travel have undergone massive transformations in their customer journeys and have invested heavily in the user experience. Even tightly regulated sectors like insurance, healthcare and pharma have innovated with an emphasis on service and customer experience. While all these industries are looking outward, manufacturing has mainly been looking inward. The Internet of Things (IoT), Artificial Intelligence (AI) and Robotic Process Automation (RPA) are already receiving significant investment from large manufacturing companies. But many medium-sized manufacturers are still using systems & processes that date back to the previous century and this applies in particular to their sales and marketing activities as well as the connectivity required between their sales, production & channel partners. Being easy to do business with Of course, many manufacturing companies are five or six steps removed from their end-users, particularly if they are a component manufacturer. In B2B too, the customer has changed. B2B buyers do a lot more research online, comparing offerings and expect the same kind of user experience as an individual consumer does. This customer experience is influenced by many factors, but many centre around how easy it is to do business with a

company. This is not just about sales and marketing being customer-focused instead of product oriented. It's also about being transparent and consistent on pricing, and sending invoices and credit notes that are easy to understand. Digitisation in manufacturing has to happen across all systems and processes, from sales and marketing to supply chain and all back-office functions. Each of these functions has to be digitised and transformed, without forgetting to build all the connections between front office and back office. No rip and replace The good news is that many organisations already have a lot in place and can switch gears guickly. When consumer packaged goods organisations like Heinz lost some of their sales channels due to the COVID-19 lockdown, they set up different routes to market, for instance by putting in place an eCommerce solution for direct-to-consumer. For Heinz, this meant launching Heinz to home. The same happened with chocolate retailer Lindt in Canada, which had to close their 50 shops and went online. They didn't have to spend millions doing this, they could simply use capability that was already prebuilt. What it did require, though, was a more customer-centric approach on how they were organised. No rip and replace required. All that is necessary to make this move is to realign their focus on a go-to-market strategy that is centred on how to serve customers better and how to sell goods and services to them, with less emphasis on productivity, quality and unit cost. Technology and vision You may wonder if in this day and age it is a good moment to invest heavily in digital capabilities. I would argue that it is. In the past, when we had crises of this nature, those organisations that invested in customer-facing technologies were, in general, able to accelerate growth and profit at a greater rate than their peers who didn't. Research from McKinsey on the repercussions of the 2008 financial crisis shows that 13% of enterprises fared better post-crisis. Why? They were prepared, had to optimise, built a solid infrastructure, were more agile and had seen the next wave coming. There is always a next wave coming, so companies should prepare. Becoming more customer-centric is not merely a technology exercise that needs big investments, it is also about hiring and retaining digital talent, creating ambition and vision at board level and - let's not forget - change management and user adoption. The winning manufacturers of tomorrow will be the companies that develop a mature vision and drive it throughout the organisation, installing the right technology that enables that vision and hiring the right talent to make the vision come true. All these elements have to be put in place if companies are going to survive. The pace of change is increasing, and companies can become obsolete in a matter of years. Companies that are heralded as the number one today, may be struggling tomorrow if they take their eyes off of what the customer wants. The current COVID crisis has only accelerated the move to digital. For companies that have not started their digital transformation yet, there is no time to waste. Industry: Richard Henry Senior Management Consultant, Wipro Richard provides Wipro customers with industry vertical expertise within manufacturing & distribution having spent over 30 years working in both B2B & B2C with brands such as DuPont, GE, Group Rocher SA, Wolseley PLC, Wilko, Rexel SA & Howdens PLC. He has held positions as diverse as Chief Operating Officer, IT Director, E-Commerce Director and Multi-Channel Director / Digital Director. He has spent the last 15 years creating, delivering & owning digital transformation within organisations mostly with P&L responsibilities. Manufacturers were once many steps removed from their customers, with

wholesalers and distributors providing a crucial link to sales. With the titanic shift that has occurred in business, only customer-centric companies will survive. Manufacturing companies are under pressure. Cost of raw materials is rising, while increased competition is driving down end user pricing. Salaries are rising at a level that manufacturing automation alone cannot absorb and the race to acquire talent is increasing. This forces manufacturing companies to find other ways of boosting profitability.

#### Three Ways to Optimize the Supply Chain to Become Customer Centric

----- Arcticle source ----- https://www.wipro.com/blogs/richard-henry/threeways-to-optimize-the-supply-chain-to-become-customer-centric/ ----- About the Authors Contact Wipro Related Blogs Partner Automation is Key to Maximizing the Manufacturing Ecosystem Five ways manufacturing companies can boost profitability Close collaboration across the value chain, both up and down stream Please fill the required details to access the content Three Ways to Optimize the Supply Chain to Become Customer Centric September | 2021 With the titanic shift that has occurred in business, only customer-centric companies will survive. For the manufacturing industry, having to deal with end customers has been a shock. Traditionally, manufacturers did not have direct contact with customers and could hide behind a sales channel of distributors, resellers, or integrators. The advent of direct digital sales channels has brought customers and manufacturers face-to-face, so the demands and wishes of customers can no longer be ignored. Managing them can be challenging, but there are three ways to get started. Diversify the Supply Chain to Spread Risk "Pivot" has been the most-overused word of the past year. By definition, it means companies are able to adapt to market circumstances instantly. For most businesses, flexibility and agility have been corporate qualities for longer than just the past 12 months. But in 2020, every organization had to pivot to change its existing ways of operating. While most supply chains have shown great resilience, it became clear that single sourcing as a means to reduce production cost comes with a risk. In the future, manufacturers need to diversify that risk by spreading production over different countries and even bringing some production home if feasible. Diversifying supply chains will help prevent product shortages and allow manufacturers to react quickly to future disruptions. But with a multi-pronged supply chain, powerful tools will be needed to manage these complex streams of raw materials, half-finished products, and finished goods. Providing customers with information access on the supply chain journey at various touch points helps reinforce the customer centric approach as previously end customers were granted limited visibility. Glocal: Think Global, Act Local More than ever, the manufacturing industry needs to think global and act local. To make that happen, processes have to be streamlined internally and externally. Programs such as Quote-to-Cash can ensure the entire process

runs seamlessly - from taking the customer order to invoicing goods to services delivered to recognizing revenue. These software solutions make it possible for manufacturers to sell directly to the consumer. Portals and ecommerce tools bring customers and manufacturers together and allow companies to react swiftly to customer requests, demands, and fulfillment needs. And while these tools make it possible to sell direct, the software needs to take into account the partners that work with customers and vendors. By putting customers at the epicentre of the supply chain journey organisations can now start to embed an experience first culture across the supply chain compared to the past. Get the Right Data For companies to maximize their efficiency, it is crucial to know what customers expect and when they expect it. This predictability allows sales and operations to make sure the entire supply chain is geared up to deliver the right product on time and with the right margin. If everyone in an organization has access to the same data and reports, predictability can be achieved to match supply with demand. A single source of data means all colleagues have insight into stock levels, margins, run rate business status, and pending opportunities. And, when companies have a single source of truth, it becomes much easier to use artificial intelligence tools such as Einstein Analytics to help make the right decisions and steer future directions. Accurate forecasting is a great way to boost profitability. In fact, according to the Institute of Business Forecasting, an average consumer packaged goods company can save more than \$3 million for every percent improvement for under-forecasting errors and \$1.43 million when improving the over-forecasting error. Technological Optimism Change is hard, but the challenges of the past year have pushed companies to embrace or advance their digital transformations due to evolving business practices. The effects will be felt in the long term. According to The Economist, a new dawn of technological optimism is breaking. Companies that capitalize on these technological breakthroughs will be the winners in the years to come, even for the manufacturing industry. Industry: Richard Henry Senior Management Consultant, Wipro Richard provides Wipro customers with industry vertical expertise within manufacturing & distribution having spent over 30 years working in both B2B & B2C with brands such as DuPont, GE, Group Rocher SA, Wolseley PLC, Wilko, Rexel SA & Howdens PLC. He has held positions as diverse as Chief Operating Officer, IT Director, E-Commerce Director and Multi-Channel Director / Digital Director. He has spent the last 15 years creating, delivering & owning digital transformation within organisations mostly with P&L responsibilities. Thomas Dorby Nordics Manufacturing & Consumer Goods Practice Lead, Wipro Limited Thomas leads the Manufacturing & Consumer Goods Practice in the Nordics providing industry vertical experience and insights allowing customers to connect strategic ambitions and challenges to the right digital solution and transformation. Having spent more than 17 years in retail, manufacturing and high tech in roles driving strategic sales development, commercial excellence and sales operations - he has thorough insights into the overall strategic challenges, best practices and trends in the industry. Manufacturers were once many steps removed from their customers, with wholesalers and distributors providing a crucial link to sales. Manufacturing companies are under pressure. Cost of raw materials is rising, while increased competition is driving down end user pricing. Salaries are rising at a level that manufacturing automation alone cannot absorb and the race

#### Partner Automation is Key to Maximizing the Manufacturing Ecosystem

----- Arcticle source ----- https://www.wipro.com/blogs/richard-henry/partnerautomation-is-key-to-maximizing-the-manufacturing-ecosystem/ ----- About the Authors Contact Wipro Related Blogs Three Ways to Optimize the Supply Chain to Become Customer Centric Five ways manufacturing companies can boost profitability Close collaboration across the value chain, both up and down stream Please fill the required details to access the content Partner Automation is Key to Maximizing the Manufacturing Ecosystem November | 2021 Manufacturers were once many steps removed from their customers, with wholesalers and distributors providing a crucial link to sales. Managing channels or distributors was never a simple or easy route to market, as manufacturers had to juggle inventory, forecasts, changing demand patterns, and evolving relationships. Although technological advancements impacted channel management, the space did not change much for 40 years. Then, during the past five years - and especially the past 16 months - the sector saw an explosion of interest in navigating the disintermediated B2B world, as all stakeholders have suddenly came to terms with a direct-tocustomer world. Now, four areas that traditionally proved problematic partners, forecasting, relationships, and changing customer demands - can receive some long-overdue improvements with partner automation. Channel Partner Challenges When one thinks of partners, ostensibly we think about people. But channel partners are organizations with their own agendas, problems, opportunities, and people. They are organisms that suppliers cannot control. Furthermore, these indirect sales teams may have different priorities than other vendors, as their revenue and margin targets are not limited to one single source of supply. In the past, manufacturers overcame this with rebates, marketing incentives, or whatever could entice partner organizations to sell their products over the competition's. The complexity and ambiguity of these relationships meant that managing a channel network was time-consuming and difficult. Managing rebate and marketing schemes alone could be extremely labor intensive, with data often siloed in different departments, providing very limited visibility for the commercial team to use to their advantage. Manufacturing automation can easily address

rebate and incentive management. Solutions like the Rebate Platform from Salesforce attempt to remove silos by extending the customer data to include rebate and incentive information. This includes digitizing manual rebate planning/pay out and secure data sharing between colleagues and the distributor network, providing data on program ROI and total transparency. Extending visibility for partners about the supply chain, rebates, forecasting, and other attributes helps manufacturers differentiate themselves by improving the relationship with their channel partners - in effect utilizing B2C customer-experience techniques for their B2B partner network. By automating the entire promotion process, manufacturers are essentially moving the dial from a transactional to a relationshipbased model with channel partners. This shift will be impactful, considering the experience expectations for the new generation of channel partners. Getting the program right is about driving partner behaviors away from the transactional/volume/discounting-based experiences of the past, and toward a relationship/performance-based, digital-first program. This ultimately leads to better engagement of the entire customer base, and at lower cost. Forecasting The ability to accurately forecast demand is paramount in sectors where the deal size is traditionally large or a business model such as construction or automotive supply. Forecast accuracy, if off by just a simple percentage point, can negatively impact organizations to the tune of many millions of dollars. The predictability of demand is enhanced by the channel network. Even with its complexity, the network can smooth-out peaks and troughs and protect the manufacturer. Sharing data between suppliers and customers is one way to improve forecast accuracy, deepen relationships, and improve the supply-chain experience, ultimately impacting the end user experience. Traditional CRM solutions or opportunity-based models don't tend to cater for run rate or project-based business models; therefore, they need to be modified or replaced to accommodate such features. This means the visibility of sales agreements, delivered actuals, and forecasts rely on multiple spreadsheets to provide sales and operations staff with their version of the truth. Nobody can see the total picture, which makes forecast accuracy (if measured at all) somewhat of a lottery. By combining opportunity-based business with run rate, solutions like Salesforce's Manufacturing Cloud can address these traditional CRM limitations, especially as the manufacturers' portion of the runrate business can be substantial. These types of automated solutions can also accommodate run rate/sales/framework agreements as part of the go-to-market or supply chain model. Improving Channel Partner Relationships Traditionally, sales reps visited customers in person with product catalogues and/or to discuss or negotiate contracts. As this model became more expensive, companies began managing customers and partners based on account tiering. This meant only the biggest revenue generators received face-to-face service. Today, manufacturers can utilize digital technology and automation to enhance the relationship with all of their channel partners, not just the biggest spenders. Creating partner portals or gated parts of the ecommerce platform are effective ways for manufacturers to provide all partners with the digital equivalent of brand assets, training materials, news, and detailed product information. And, since all of the information is online, channel partners can self-serve on-demand, a model that is exactly what they prefer. Accommodating Seismic Shifts in Customer Demand Millennials, who generally prefer a different and digital way of doing business, are now reaching positions of purchasing power. They have grown up online and are accustomed to real-time responses and excellent customer service. Millennials in the manufacturing sector demand the same B2B experience journey they've come to know from their B2C environment. Their "loyalty" is more experience- than brand-based, and they want to conduct business on their terms, not their vendors' (via chat-bots, email, SMS, mobile, face-to-face, or a combination of all of these). How that experience is defined across supply chains, pricing, sourcing and more is both a challenge and opportunity. Those organizations that are firstmovers to differentiate on experience will ultimately be the winners, and it may not come at the expense of price or margin. The past few decades have given rise to the growth of production automation, sales automation, marketing automation platforms, and more. But partner automation has become a new focus as manufacturers realize that the demands and expectations of the buyers within their channel partnerships are changing. Today, the customer experience within the dealer/channel/distributor network is more likely to impact the success or failure of a partner's performance. By adopting partner automation, many of the manufacturer's challenges can be resolved for everyone, not just top-tier partners. Automation can also help these networks evolve, which is an essential step for both distributors and manufacturers to respond to ever-changing customer and market demands. Industry: Richard Henry Senior Management Consultant, Wipro Limited Richard provides Wipro customers with industry vertical expertise in manufacturing and distribution. He helps companies translate their vision into digital transformations. Richard has vast experience with B2B and B2C customers including DuPont, GE, Group Rocher SA, Wolseley PLC, Wilko, Rexel SA, and Howdens PLC. Thomas Dorby Nordics Manufacturing & Consumer Goods Practice Lead, Wipro Limited Thomas leads the Manufacturing and Consumer Goods Practice in the Nordics providing industry vertical experience and insight. He helps customers connect strategic ambitions and challenges to the right digital solution and transformation. Thomas has over 17 years of experience in retail, manufacturing, driving strategic sales development, commercial excellence, and sales operations. With the titanic shift that has occurred in business, only customer-centric companies will survive. Manufacturing companies are under pressure. Cost of raw materials is rising, while increased competition is driving down end user pricing. Salaries are rising at a level that manufacturing automation alone cannot absorb and the race to acquire talent is increasing. This forces manufacturing companies to find other ways of boosting profitability. John slowly counts all the open applications and tabs on his computer. His heart sinks. Does he really need all these data sources to renegotiate the contract with Constructibuild? John is a key account executive at a leading manufacturer of cabling components, and his main customer has asked him to renew their annual contract. And can he please come up with a very competitive price, taking into account all last year's orders - both the run rate orders and the one-off orders for specific https://www.wipro.com/blogs/brian-coles/ ---- Contact Wipro Blogs By

Author How Apple's New Privacy Update can Create Better Marketers Give every sales rep their own personal marketer Take the hassle out of marketing reporting... and get the marketing kudos you deserve 5 ways that lead scoring can close the gap between sales and marketing Please fill the required details to access the content Brian Coles Brian Coles Director of B2B Marketing Advisory, Wipro Brian Coles heads up the B2B Marketing Advisory for Europe. He is on a mission to transform marketing teams from a cost to a profit center. He is an author, podcaster and blogger and has spent years travelling around the planet on a motorbike. He's met many incredible people both on his travels and in organisations and wants to tell you about them. He is a Londoner, lives in Denmark with his wife and three children, and can't wait for you to read his new book at http://www.briancoles.com. Apple's upcoming Mail Privacy Protection feature may be a triumph for data privacy Wouldn't it be grand if your organisation could provide each salesperson with a personal marketer? Just imagine: Sales could respond immediately to a buying signal from a prospect, using the template messaging that Marketing has developed while adhering to all corporate guidelines. When you work in marketing automation, you get to see lots of data. Data is all over the place. It's in your hair and between your toes. "When hell freezes over." That is what Eagles drummer and co-vocalist Don Henley had to say on the chances of the country-rock band ever getting 

#### 5 ways that lead scoring can close the gap between sales and marketing

----- Arcticle source ----- https://www.wipro.com/blogs/brian-coles/5-waysthat-lead-scoring-can-close-the-gap-between-sales-and-marketing/ ----- About the Author Contact Wipro Related Blogs Cloud Economics: Driving Business Value Through Discipline De-Risking Mainframe Modernization for the Banking Industry The Day After: De-risking Legacy Modernization Please fill the required details to access the content 5 ways that lead scoring can close the gap between sales and marketing June | 2021 "When hell freezes over." That is what Eagles drummer and co-vocalist Don Henley had to say on the chances of the country-rock band ever getting together again after their 1980 split. That is also the feeling many people have on sales and marketing professionals becoming friends. We believe that working together on a marketing campaign can make this happen, especially if you use lead scoring, and more specifically, category scoring. For years, marketing and sales were silos inside organisations. Sales leads formed a bone of contention. Marketing complained that sales were not following up on the leads marketing provided, while sales showed themselves less than pleased with the quality and quantity of leads. At least they both agreed that leads were important. From our experience in implementing marketing automation, we see that the gap between sales and marketing is closing. And about time! Marketing automation tools are doing a great job in helping close that gap, as sales and marketing need to align closely to get the results that sales and marketing teams are compensated on. We found that lead scoring can bring sales and marketing closer. Improving lead scoring and introducing category scoring will make the sales process more efficient and will shorten the sales cycle. Here are 5 ways that lead scoring can make sales and marketing teams bond. 1. Decide on your fit/engagement matrix When is a lead 'hot' enough for sales reps to follow up? When is a sales lead specific enough to merit a rep mail or phone call? That is something that marketing and sales can decide on together, by setting up a fit/engagement matrix. In this matrix you will rank prospects on two axes: one for fit, one for engagement. In the 'fit' part of the equation you will look at parameters such as the role of the prospect in the organisation, geography, size of the company, etc. On the engagement side, you take into account what activities a prospect performed: attending a webinar, downloading a white paper, clicking an email link, etc. Pardot lead scoring combines prospect demographic and behavioural data to prioritise leads. By plotting these parameters on a quadrant, you immediately see what prospect merits what course of action. High fit/high engagement represents low-hanging fruit for a sales rep. 2. Design a customer journey the nurtures the leads until they are ready for sales Prospects in the high fit high engagement quadrant warrant immediate action. The other quadrants merit attention too, and sales and marketing should decide together on the course of action to take to push these into the top right-hand corner. The customer journey for each segment will be different. High fit low engagement are an interesting segment to apply account based marketing to, or invite top management to executive events. Low fit low engagement can be nurtured further in a more effortless way by inviting them to webinars, proposing downloads, etc. 3. Put lead scoring on steroids by using category scoring Category scoring is one of the strongest features in Pardot. While a lead score will already tell you that a prospect is hot for you, you may not know exactly what they are hot for. Category scoring is lead scoring on steroids. A category score will tell you what a lead score actually represents in terms of products, complexity drivers, customer pains, etc. These are categories that sales and marketing can decide on together to refine the leads and provide sales with as much detail as possible on what the lead score really means. As an example: if you are a food distributor, you will want to know whether retailer prospects are interested in dairy products, meat, seafood or any other product category. A sales rep who possesses this detailed level of information will be able to get to the point faster. And shorten the sales cycle. Additionally, category scores will allow you to kick off trigger based relevant messaging when a score reaches a watermark. 4. Put a cap on the lead score and take timing into account When attributing scores to a lead, a high number may seem very attractive, but it may be interesting to evaluate over what period of time that score has been accumulated. A lead score of 500 looks very promising, but if took two years to get there, the prospect may not really be hot anymore. So it might be a good conversation opener for sales and marketing to chat about putting the counters back to zero from time to time, or subtract points for inactive periods, say minus 50 points per month of inactivity. This is not an easy choice, and you need to take the length of your average sales cycle into account. If your business has a long sales cycle, you should not put the counters back to zero every quarter. This really merits a good discussion between marketing and sales. 5. Adapt your lead scoring system based on feedback from sales Will you get lead scoring right from

the first time? Some do, but its rare. Setting the lead scoring system and the points right from day one does not happen often. This is another area which facilitates a good conversation between sales and marketing, and you can tweak the scoring system as you go along. Ask sales how the process went and if the scores really mapped the interest of the prospect. If sales complain they are getting too many leads, adapting the scoring system can be adjusted. A lead scoring system has to change just like human behaviour changes. Producing actionable leads Keep one thing in mind though a lead score is not a vanity metric. While it is a nice number to project during a sales and marketing meeting, know that a lead score serves a purpose: providing sales with hot leads that are actionable and will make sales successful. Implementing category scoring makes leads even more actionable. Category scoring is where the rubber really hits the road, and where marketing can make sales shine. And as we all know, happy sales make happy marketing. Industry: Brian Coles Director of B2B Marketing Advisory, Wipro Brian Coles heads up the B2B Marketing Advisory for Europe. He is on a mission to transform marketing teams from a cost to a profit center. He is an author, podcaster and blogger and has spent years travelling around the planet on a motorbike. He's met many incredible people both on his travels and in organisations and wants to tell you about them. He is a Londoner, lives in Denmark with his wife and three children, and can't wait for you to read his new book at http://www.brian-coles.com. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business benefits that come with them.

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# Take the hassle out of marketing reporting... and get the marketing kudos you deserve

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lots of data. Data is all over the place. It's in your hair and between your toes. We are all striving to be data-driven marketers, but the data deluge reminds me of what John Naisbitt famously said 40 years ago: "We are drowning in information but starved for knowledge". As marketers we need the right data at the right time. Fortunately, for Pardot users, there's an amazing feature that does just that: the Engagement History Dashboard. Engagement History Dashboard, launched last year, gives sales and marketing users the power to explore and visualise important data. It's a Lightning Component that brings Pardot data into Salesforce. Basically, it's the reporting tool that marketing automation professionals have been waiting for all their professional lives. Engagement History Dashboard shows how marketing is making money for the company and how marketing influences sales opportunities. Isn't that what marketing is all about? Engagement History Dashboard tells sales what buttons to push You can look at an Engagement History Dashboard from two different lenses: Your sales colleagues will primarily be interested in the engagement of their customers with marketing. The Engagement History Dashboard delivers sales a wealth of information on their accounts. Who are the most active contacts at that account? What products or services are they interested in? What assets of ours do they engage with? Sometimes, customers will pretend not to be interested in a certain product, while their engagement history shows the opposite. A sales rep can immediately take action based on this information and send off an email to their contact person. Make life even easier on sales (isn't that our life's mission after all?) by providing email templates they can use. If your sales team is into Account Based Marketing, the Engagement History Dashboard will show them exactly what buttons to push and what levers to pull to get the right message to the right contact person. Compare campaigns and advanced campaign reporting with custom report types As a marketer who wants to get the best bang for your buck, setting up Engagement History (prerequisite for the Engagement History Dashboards) allows you to compare campaigns and their associated assets to one another. This is achieved via creating custom report types to link campaigns to emails, links, forms etc. Some examples: Before Engagement History Dashboard, making these comparisons was a lot more time intensive as it necessitated going into different areas of Pardot to pull up the information. Now it's all together in one view. Engagement History Dashboard is easy to set up The beauty of Engagement History Dashboard is that it is not hard to set up at all. You may need a hand from the Salesforce Admin to get everything going, and, of course, you need to have Connected Campaigns running as well as Pardot Lightning. Once all that is done, a wizard guides you through the installation process. A note of caution: you need a good level of marketing automation hygiene to get the most of Engagement History Dashboard. Your campaign hierarchy (grandparent, parent, child) and the naming of them, need to make sense. Otherwise comparing campaigns will be harder to do. Also super important: sales needs to add contact roles to opportunities to really get the link between won opportunities and campaigns. This is the glue between what marketing is doing and an opportunity. Engagement History Dashboard brings marketing and sales data together at last, and literally on the same page! So? What are you still waiting for? Why are you still reading this? Get started now and ensure you get the marketing kudos you totally deserve. Industry: Brian Coles Director of B2B Marketing Advisory, Wipro Brian

Coles heads up the B2B Marketing Advisory for Europe. He is on a mission to transform marketing teams from a cost to a profit center. He is an author, podcaster and blogger and has spent years travelling around the planet on a motorbike. He's met many incredible people both on his travels and in organisations and wants to tell you about them. He is a Londoner, lives in Denmark with his wife and three children, and can't wait for you to read his new book at http://www.brian-coles.com. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business 

### Give every sales rep their own personal marketer

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promiscuity. The sales and marketing trick consists in catching the customer while they are looking at your goodies and acting immediately. And that's where Salesforce Engage helps, with customised Alerts, Campaigns and Reports. Engage Alerts Engage Alerts are real-time services that inform you about prospect activity. These alerts tell you what content prospects are consuming, what newsletters they are subscribing to, etc. Clicking on an alert will take you to the contact record in your Salesforce app. To risk being flooded with alerts, sales can filter prospects based on location and activities. Engage Campaigns Campaigns is the true personal marketer, as it allows sales reps to send tracked emails via Salesforce to one specific prospect or to a group of them. Rather than letting Sales write their own emails, Marketing can provide templates with the right messages to be sent, thus ensuring that all emails are on-message. Engage Reports Engage Reports tracks all these emails you have sent for engagement and lets an Engage-user track how leads and contacts interact with Engage Campaigns, for instance which emails were opened, what users clicked on, etc. Reports can be set up per user or for a team of salespeople. In short, Salesforce Engage allows Sales to see what people are doing, act on it and analyse the performance of their actions. Optimising thought processes Tools such as Pardot and Salesforce, and all the functionality in them, help bridge the gap between Sales and Marketing, assisting them in working together towards the same goal: bringing in business for the company. While Pardot helps optimise content processes, and Salesforce automates sales processes, Salesforce Engage goes further than that, actually optimising thought processes. You can look into the mind of a prospect, and strike while the iron is hot. Industry: Brian Coles Director of B2B Marketing Advisory, Wipro Brian Coles heads up the B2B Marketing Advisory for Europe. He is on a mission to transform marketing teams from a cost to a profit center. He is an author, podcaster and blogger and has spent years travelling around the planet on a motorbike. He's met many incredible people both on his travels and in organisations and wants to tell you about them. He is a Londoner, lives in Denmark with his wife and three children, and can't wait for you to read his new book at http://www.brian-coles.com. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business benefits that come with them. =============

### How Apple's New Privacy Update can Create Better Marketers

----- Arcticle source ----- https://www.wipro.com/blogs/brian-coles/how-applesnew-privacy-update-can-create-better-marketers/ ----- About the Author Contact Wipro Related Blogs Cloud Economics: Driving Business Value Through Discipline De-Risking Mainframe Modernization for the Banking Industry The Day After: De-risking Legacy Modernization Please fill the required details to access the content How Apple's New Privacy Update can Create Better Marketers August | 2021 Apple's upcoming Mail Privacy Protection feature may be a triumph for data privacy, but marketers may not be cheering for it. The update will hide data about email open rates across all iOS, Mac, and Apple Watch platforms, a sign of how seriously Apple treats data privacy. However, Apple's email platforms account for 46% of all email opens, meaning this feature will have a big impact on marketing teams around the world. First, data about open rates will become unreliable, because it will only reflect information from non-Apple devices. Second, the new privacy policy will prompt some ISPs to revisit deliverability algorithms, bringing more changes. And third, email campaigns will require marketing teams to re-examine how to define and measure success. Amid these changes, however, lie several opportunities to become a better marketer. Shifting Email Success Metrics Several solutions exist today that can help marketing teams revise and measure their campaign success. For example, the Salesforce B2B marketing platform, Pardot, is also focused on privacy but includes features that allow marketers to measure customer interactions. Regardless of the platform, marketing teams need to shift their focus on success metrics and use this moment to gain deeper insights about their prospects. Consider these ideas: 1. Email open rates have always been an unreliable metric. For every HTML email, a text version is also sent, and this text-only email never records an email open action. Relying solely on email opens as an engagement metric thus fails to reflect the actions of people who prefer the text-only version. 2. If marketers want to continue measuring open rates, there is a way to obtain a more accurate metric. A feature of Salesforce, Datorama, goes deep into email engagement metrics to identify the percentage of users that use Apple mail. This makes it possible to isolate and measure non-Apple mail clients. 3. Marketers may want to shift to tracking and reporting all email clicks and not solely open rates. This can enable them to revisit and adjust any buyer journeys that were developed, looking for insights from those journeys with the highest email open rates. Pardot allows reporting and various actions on specific link clicks. This makes reporting more relevant and focused on the real intent of the email: getting people to a landing page. 4. Consider ditching the open email vanity metrics. If you are just measuring opens, you should reconsider the goal of an email campaign. The goal should be to get a user to interact with the brand. Use the 360 degree view on buyers to unify all of their interactions with data from web analytics and the sales database. This allows a detailed analysis to learn what is motivating engagement with your customers. 5. Finally, use Pardot's lightning mail builder and leverage the

new, powerful, Einstein Artificial Intelligence feature called send time optimisation. Our experience with this feature has shown increased click through rates; when engagement increases, the chance of creating opportunities increases, which is the whole point of a campaign. Initially, marketing teams may see the Apple privacy update as a setback in terms of collecting meaningful, actionable, engagement data. Instead, this should be seen as an opportunity to refocus on the data and insights that really move the revenue needle in a positive direction. The evolving landscape of privacy will not stop here. By embracing it, being transparent, and remembering who is ultimately trusting us with their data -customers - marketers can become better at their craft by deepening their insights and putting the customer first. Industry: Brian Coles Head of B2B Marketing Advisory -Europe, Wipro Limited Brian has worked in marketing and technology for over 20 years. He has managed over 3000 B2B marketing campaigns. Brian lives in Denmark, is an podcast host (for Dear Marketing Automation), is a father of three and is the author of "Your Marketing Automation Journey & Talks from the Real World". Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business Arcticle source ---- https://www.wipro.com/blogs/sourabh-chordiya/ -----Contact Wipro Blogs By Author Run SAP on Google Cloud for Increased Business Efficiency and Growth Please fill the required details to access the content Sourabh Chordiya Sourabh Chordiya Senior SAP Solutions Architect Sourabh is an experienced SAP Solutions architect with vast experience delivering SAP on Public Cloud (Azure, AWS and GCP) and SAP S/4HANA transformations. He is experienced to help customers with their transformation journey and has expertise in Pre-Sales, Solutions, Delivery and provides quality assurance consulting to customers during the entire project lifecycle. For more details, please reach out to sap.marketing@wipro.com Running your SAP on Google Cloud Platform is cost effective and increases... =======================

#### Run SAP on Google Cloud for Increased Business Efficiency and Growth

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specific analytics and intelligence. Our experience indicates that not even 1% of data generated is used for AI/ML purpose. The untapped potential of this data to unlock valuable insights for business efficiency and growth is tremendous. It can be in the retail industry where such data can help to maintain inventory levels in stores, or the healthcare sector where patients can be proactively informed about potential health risks and treatment can be initiated earlier on. GCP enables running SAP workloads on HANA database and other major currently supported databases by SAP as per the production availability matrix, and both Windows and Linux OS are supported. The flexible and customizable CPU configuration in GCP provides precise sizing and reduces resource wastage when a matching machine specification is not available as per the customer's SAP sizing. Wipro provides migration services to all major public platforms for SAP workloads and has gained extensive experience by working closely with all the vendors. Wipro has migrated their own SAP systems that support the operations for over 180,000 employees to GCP and enjoy a strong and mutually beneficial relationship with Google for co-innovations. References Industry: Sourabh Chordiya Senior SAP Solutions Architect Sourabh is an experienced SAP Solutions architect with vast experience delivering SAP on Public Cloud (Azure, AWS and GCP) and SAP S/4HANA transformations. He is experienced to help customers with their transformation journey and has expertise in Pre-Sales, Solutions, Delivery and provides quality assurance consulting to customers during the entire project lifecycle. For more details, please reach out to sap.marketing@wipro.com Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. Research by the Nonprofit Technology Enterprise Network (NTEN) states that only 25% of nonprofit organizations actively monitor their network for security events, and only 7% have undergone a cyberattack simulation activity. The low investment in security can be attributed to the small size of most nonprofits and their data sets, which makes them believe they have a lower risk of cyberattacks compared to large profit organizations. In reality, nonprofit organizations are low-hanging fruit for hackers due to the gap between the security risk and the actions needed to address the risks. That is what makes nonprofits ideal targets, and why they should take steps to protect themselves. www.wipro.com/blogs/melissa-beuc/ ----- Contact Wipro Blogs By Author Manufacturing 2020: Integrated Data, a Slingshot to a Resilient Future Please fill the required details to access the content Melissa Beuc Melissa Beuc Global Director of Strategic Marketing Melissa Beuc is a Global Director of Strategic Marketing for the Manufacturing, Energy, and Financial Services at Appirio. She's a big fan of Speed Racer and proud Hoosier transplant. Manufacturers are the backbone of the economy

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## Manufacturing 2020: Integrated Data, a Slingshot to a Resilient Future

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devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

www.wipro.com/blogs/suzanne-jdann/ ---- Contact Wipro Blogs By Author Hyper-Personalization: A Data-Driven Customer Engagement Model Please fill the required details to access the content Suzanne J. Dann Suzanne J. Dann CEO - Americas 2 Suzanne Dann is Wipro's CEO for the Americas 2 region and is also a member of the Wipro Executive Board. She leads the Financial Services, Manufacturing, Energy and Utilities, and Hi-Tech sectors, as well as Wipro in Canada. With over 25 years of experience in consulting and technology services, Suzanne has held multiple leadership positions at both IBM and Avanade. She joined Wipro in April 2021 as the Senior Vice President of Capital Markets and Insurance, successfully leveraging her deep industry expertise to deliver growth and build a highperforming team committed to client success. Suzanne also serves as the Executive Sponsor for Americas 2 Diversity and Inclusion initiatives. Suzanne holds a B.S. degree in Engineering from Cornell University and a CISSP. She currently resides in New Jersey with her husband and their two children. In her free time she enjoys hiking, golf, and traveling with her family. By 2030, millennial's aggregate annual income is expected to surpass \$4 trillion. ============

#### Hyper-Personalization: A Data-Driven Customer Engagement Model

----- Arcticle source ----- https://www.wipro.com/blogs/suzanne-jdann/hyperpersonalization-a-data-driven-customer-engagement-model/ ---- About the Author Contact Wipro Related Blogs Data: A Strategic Asset Enabling Value Creation for Insurers All about NIGO (Not In Good Order) Insurance Service Forms What Banks Need to Know About Nordic Cross Border Payments or P27 Please fill the required details to access the content Hyper-Personalization: A Data-Driven Customer Engagement Model July | 2021 By 2030, millennial's aggregate annual income is expected to surpass \$4 trillion. They are also expected to hold five times as much wealth as they did in 2019, and to inherit more than \$68 trillion from previous generations. Millennials and Gen Z are making significant financial decisions. They are investing, setting long-term financial goals and buying insurance. Consumer preferences of these generations are influenced by their digital-first attitudes. They expect, for example, personalized services tailored to their demographics, interests, location, personality, across all interactions. To meet this demand for personalization, and keep pace with changing consumer preferences, insurers need to focus more on their data strategy. Figure 1: Millennials and Gen Z will represent two-third of global labor force by 2030, and will have growing financial needs. Harnessing the full power of big data. Our increasingly digitalized world produces huge amounts of data. IDC estimates that the amount of data generated over the next three years will surpass that generated over the past 30. Access to large volumes of third-party data is already helping insurers better understand their customers and develop new approaches to meet their needs. Based on elaborate data around clients' lifestyles and behavior, insurers can offer customized products. Individual data from wearables, telematics, and IoT sensors, for example, help insurers personalize offerings while making prudent risk-specific underwriting decisions. Guided by customer data and insights, companies are now in a better position to upgrade and create agile risk models based on the fast-changing customer needs and behaviors. Wipro worked with a large Australian Insurer to create an algorithm that allocates risk scores to individual vehicle drivers based on their driving behavior, enabling the insurer to identify potential red zones — high risks for exposure and loss probability. Our client was able to incentivize drivers to adopt safer driving behaviors by simultaneously offering discounts to drivers with superior risk scores and charging higher premiums to drivers with inferior risk scores. This hyper-personalized insurance product is a winwin for both customers and the insurer because the price is based on the individuals' driving behavior, not simply on vehicles' models and makes. Hyper-personalization increases likelihood of favorable outcomes Insurers are investing in building complex algorithms and data analytics platforms to track user behavior, buying patterns, and potential lifestyle needs. These investments aim to identify the ideal moment to pitch prospects to increase the probability of a sale. Examples include showing customers life insurance ads when their shopping online for wedding-related goods and services or purchasing baby diapers, or showing them a motor insurance ad after they've booked a test drive online. This hyper-personalized content can be created exclusively for an individual based on linked profiles, social media pages, and online shopping behavior. An insurance platform from a leading Chinese technology conglomerate, in collaboration with well-known insurance companies, leveraged the conglomerate's deep data analytics capabilities around online behavior and social insights to sell over 25 million policies in a year. This volume of sales constituted an exponential rise compared to previous years, and was largely attributed to the company's ability to hyper-personalize insurance products based on customers' needs. Hyper-personalization also addresses customer churn by enabling insurers to better engage customers and increase retention. The model not only facilitates the creation of suitable up-sell and cross-sell opportunities, but also enables optimization of the customer acquisition costs which can otherwise be significantly high. Figure 2: Deep customer engagement drives customer lifetime value. Auxiliary ecosystem data enables hyperpersonalization Insurers are also creating networks of connected products over and above their traditional insurance product offerings to support customer journeys across different life-stages. For instance, auto Insurers now offer support ecosystems for everything from accident assistance and repairs to temporary replacement vehicles. In these ecosystems, customer behavior is tracked to provide customers with the most relevant products and services to supplement their insurance coverage. By offering more comprehensive support for drivers, these data-driven ecosystems also promote policy renewals and successful cross-selling. Similarly, global life

insurance groups are investing in wellness ecosystems aimed at improving customers' health outcomes. These networks enable life insurance companies to gather data and feedback on the customer experience, then use those insights to create hyper-personalized products, communications, and services that benefit both the customers and the business. New-age digital insurers or sub-brands have the advantage of speed and agility Unlike new-age digital insurers, traditional insurers with legacy systems typically find it difficult to embark on hyper-personalization journeys. Upgrading legacy systems can help established insurers increase agility and personalize services. As-a-service models, including software as a service (SaaS) and platform as a service (PaaS), can also help large insurers achieve hyper-personalization. SaaS and PaaS are cost-efficient alternatives that enable speed and flexibility. Some insurers are even creating new subbrands to carve out hyper-personalized policies for millennials and Gen Z customers. A large Australian financial services provider created a separate cool sub-brand to offer hyper-personalized products to younger customers. This provider also adopted a PaaS model to power this journey, moving away from legacy systems. Hyper-personalization is becoming a core component of the digital experience In an effort to enable hyper-personalization, organizations are adopting practices that prioritize customer-centric models, drive product innovation, and promote better practices across the value chain. The success of and ROI on hyper-personalization are a function of the insurer's digital initiatives across the value chain —leveraging capabilities such as AI, automation, machine learning; building a data ecosystem that elevates customer experiences. These technology enablers can help insurers better identify, engage with, and understand new and existing customer. To extract the most value from this approach, insurers need to employ dynamic growth strategies, and execute them with the help of third-party IT partners. Industry: Suzanne J. Dann CEO - Americas 2 Suzanne Dann is Wipro's CEO for the Americas 2 region and is also a member of the Wipro Executive Board. She leads the Financial Services, Manufacturing, Energy and Utilities, and Hi-Tech sectors, as well as Wipro in Canada. With over 25 years of experience in consulting and technology services, Suzanne has held multiple leadership positions at both IBM and Avanade. She joined Wipro in April 2021 as the Senior Vice President of Capital Markets and Insurance, successfully leveraging her deep industry expertise to deliver growth and build a high-performing team committed to client success. Suzanne also serves as the Executive Sponsor for Americas 2 Diversity and Inclusion initiatives. Suzanne holds a B.S. degree in Engineering from Cornell University and a CISSP. She currently resides in New Jersey with her husband and their two children. In her free time she enjoys hiking, golf, and traveling with her family. The insurance industry has tradionally relied on data sources such as claims history to underwrite known and measurable risk. When a customer uploads an outdated version of forms or ones with missing signatures, the agents experience an interrupted workflow because they have to re-evaluate these forms for the accuracy of the seeded information. While P27 is expected to bring many efficiencies to the payments system in the Nordic region, participating banks will need to take deliberate steps to prepare for this new platform.

access the content Ramana Chivukula Ramana Chivukula Ramana (Ram) Chivukula is a seasoned IT professional with 25+ years of experience in the manufacturing and high-tech sectors. He has worked with Fortune 500s and SMBs across their entire value chains and has amassed extensive experience addressing business problems with technology. An advocate of a platform-based approach to delivering technology solutions, Ram believes that companies can excel even more by leveraging powerful platforms, like Salesforce, to deliver exceptional customer experiences. Recently popularized in logistics and manufacturing methodology

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### **Product Service Systems: Getting Started**

----- Arcticle source ----- https://www.wipro.com/blogs/ramana-chivukula/ product-service-systems-getting-started/ ---- About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Product Service Systems: Getting Started July | 2021 Recently popularized in logistics and manufacturing methodology, Product Service Systems (PSSs) are business models that integrate products and services to extend the value chain of a product. PSSs increase recurring revenue and build more sustaining relationships with customers. PSSs are designed to fulfill complex and evolving customer needs. They are a commercialized set of capabilities and products key for manufacturers who hope to bring their business to the digital age. The origin of PSS With the dawn of the Fourth Industrial Revolution, manufacturers have been challenged to differentiate in ways that involve servicing customers across digital, experiential, and personalized domains. Manufacturers that refuse to kick their addiction to products and assembly lines are quickly falling behind. Low customer switching costs, high consumer demands, and global markets have created the most competitive manufacturing marketplace the world has ever seen. Adjusting business models to add more servicing capabilities to the offering mix and creating a PSS structure can be intimidating. It requires investment, thoughtful strategy, and relentless iteration to create the right mix. Perhaps the phase that makes manufacturers most apprehensive is beginning their journey to a PSS offering structure. Beginning with carpet A 2007 article gave an interesting foundational framework with which manufacturers can begin to visualize their own PSS offering. Using the carpet industry as an example, let's imagine a hypothetical carpet company switched to a PSS model to become a full-service floor covering shop. This repositioning sounds silly, but it's an important shift for the business. Beyond the product (carpet, carpet glue), the carpet company rips out and replaces carpeting - their only service offering. However, between flooring changes, the customer is responsible for their flooring needs. It's not enough for the carpet company to have the latest carpet types in their catalog — they need to find new ways to provide value to customers before,

between, and after installations. To build a PSS, the carpet company may contract for yearly carpet steaming and regular flooring inspections. The company could keep a database of common carpet lifetimes, adjusting for factors like pets and number of family members that could help predict when a customer may need a cleaning or replacement. The company might even have a few flooring experts who could consult with customers to prescribe the right flooring based on style, function, durability, environment, and family stage of life. These new competencies and service lines allow for top line growth by adding an extra revenue stream, as well as allowing for more up and cross selling of their central product - the carpet itself. The effect of a PSS is not additive, it's multiplying. Innovation, with structure The flooring store example may seem humorous, but it's strongly paralleled to the current state of manufacturing. Innovations, like connected devices, automated assembly lines, and artificial intelligence, lack merit in isolation. However, when aligned to customer needs and extension of the customer relationship, they provide significant value. Whether the customer is a business or an individual consumer, the modern buyer expects expertise, support, and personalization from their sellers. These expectations require manufacturers to extend competencies beyond production and into servitization in order to build PSS models that can help them stay ahead of the competition. Ready to get started? If you're curious about how to get started on building business models around PSS, Wipro Salesforce Practice can help you strategize for that future and better understand the technology tools needed to support a PSS offering. It's likely you have products and services that already utilize a PSS model, but we can help you bring some rigor to those models and better track ROI and progress over time. To get started on strategizing for your future, contact Wipro Manufacturing to learn more about the modernization of manufacturing. We hope to hear from you! Industry: Ramana Chivukula Ramana (Ram) Chivukula is a seasoned IT professional with 25+ years of experience in the manufacturing and hightech sectors. He has worked with Fortune 500s and SMBs across their entire value chains and has amassed extensive experience addressing business problems with technology. An advocate of a platform-based approach to delivering technology solutions, Ram believes that companies can excel even more by leveraging powerful platforms, like Salesforce, to deliver exceptional customer experiences. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern source ---- https://www.wipro.com/blogs/deepak-hangal/ ---- Contact Wipro Blogs By Author Wipro's Click- Shift- Drive- - Giving Car Buyers What They Want: An Online Car Buying Experience Please fill the required details to access the content Deepak Hangal Deepak Hangal Deepak Hangal has over 25 years of diverse industry and IT consulting experience and is a trusted, strategic advisor leading Wipro Salesforce Practice's Manufacturing, Hi-Tech, and Canada sectors. The pandemic is changing life as we know it.

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#### Wipro's Click- Shift- Drive- -Giving Car Buyers What They Want: An Online Car Buying Experience

----- Arcticle source ----- https://www.wipro.com/blogs/deepak-hangal/wiprosclick-shift-drive-giving-car-buyers-what-they-want-an-online-car-buying/ -----About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Wipro's Click- Shift- Drive- - Giving Car Buyers What They Want: An Online Car Buying Experience July | 2021 The pandemic is changing life as we know it. We are working from home, meeting on Zoom, interacting on Google Hangouts and embracing online buying like never before. While buying groceries, electronics, and clothing online has been the norm, auto sales have traditionally lagged behind, still requiring a visit to the dealership to see, touch and drive the car before buying. However, online car buying habits are evolving. Eighteen percent of auto shoppers say they're ready to buy a vehicle sooner if online buying option is available, 48% are willing to handle price negotiations online and 42% want to handle financing online (Source: think with Google). With consumers forced to stay at home, original equipment manufacturers (OEMs) and dealers need to take advantage of the digital channel to deliver a true end-to-end seamless, contactless buying experience, which can go a long way in attracting new customers and mitigating slump in car sales. OEMs and large dealerships are strongly motivated to take their products online, as it enables them to know their customers better, amplify customer experience throughout the sales and after-sales process, and build loyalty. Sixty-three percent of purchasers said they would consider ordering their future car online (Source: think with Google). Strong growth projections in online sales presents a huge opportunity for OEMs and dealers to collaborate and figure out their respective roles in the customer purchasing journey, removing silos and consolidating data to create a single view of the consumer. This allows them to better target consumer preferences, optimize sales incentives, reduce operations costs, and drive customer loyalty and retention. The core capabilities required to unlock online sales include: To enable these digital capabilities, Wipro has launched a solution - 'Click- Shift- Drive-' - to provide a platform which enables OEMs to deploy an online marketplace that connects consumers with participating dealers. This e-commerce platform, built on Salesforce Commerce Cloud, allows consumers to search for products across dealers' inventory, filter for desired features and see details for features such as colors, trim levels, and packages. Using augmented reality, consumers can visualize the car in their driveway and, if satisfied, set appointments for a test drive. The platform provides dealer pricing and discounts, calculates trade in value, and allows customers to

pick financing or leasing options with prebuilt APIs for easy integration to ecosystem applications. OEMs will also need to invest in managing change and collaborating with dealerships to navigate through this transformation. This is an exciting opportunity for the OEMS and dealers to reimagine the digital customer journey and provide a rewarding customer experience building trust and loyalty. Industry: Deepak Hangal Deepak Hangal has over 25 years of diverse industry and IT consulting experience and is a trusted, strategic advisor leading Wipro Salesforce Practice's Manufacturing, Hi-Tech, and Canada sectors. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of https://www.wipro.com/blogs/hassan-syed/ ----- Contact Wipro Blogs By Author Personalization is critical - and achievable - for a successful online car sales strategy Please fill the required details to access the content Hassan Syed Hassan Syed Hassan is an IT executive with over 20 years of leadership experience in leveraging technology and people to transform and grow small to large scale businesses. Hassan holds five Salesforce certifications, two Conga Certifications, and several others from Apttus and Vlocity. Hassan is an expert in starting new business ventures from Lead to Cash functions and has built large teams in North America, Europe, Asia (India, Malaysia), and South America (Mexico, Brazil) with a sharp focus on execution across organizational KPIs and metrics. Until recently, the automotive industry has been one of the few holdouts from the digital 

# Personalization is critical - and achievable - for a successful online car sales strategy

----- Arcticle source ----- https://www.wipro.com/blogs/hassan-syed/personalization-is-critical-and-achievable-for-a-successful-online-car-sales-strategy/ ----- About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Personalization is critical – and achievable - for a successful online car sales strategy July | 2021 Until recently, the automotive industry has been one of the few holdouts from the digital revolution. Long thought to be one of the last remaining vestiges of in-person shopping, car dealers have largely held out delivering a true online buying experience. But in a world where 80% of customers are more likely to purchase a product or service from a brand who provides

personalized experiences, according to an Epsilon study, they are finally learning the truth: that consumers are more and more likely to buy a car online. Some car retailers are adding online options, and some companies have moved the complete buying process online. But there are still some gaps. Automotive customer data tends to be trapped in silos at various physical and digital touchpoints, giving us an incomplete view of customer engagement data, making it difficult to derive meaningful insights. To personalize online car sales, sellers must create an integrated customer persona that includes a 360-degree view of the engagement with the OEM's digital estates, other touchpoints like auto finance, aftersales service, connected car, and all the external sources like dealerships, social networks, and Tier 3 data sources. This kind of personalization maximizes customer lifetime value and, most importantly, sales conversion. We should do all this without compromising privacy and compliance. Digital content personalization in the online car buying journey will significantly improve the customer experience. Instead of showing the same images of the car to all the online car store visitors, the experience could be tailored to the customer persona. For example, a sports enthusiast is shown images of the vehicle with bike rack accessories or towing capabilities. A working mom is shown images highlighting gas mileage, storage capacity, and features like cup holders. Personalized customer incentive is another area to focus on. Leveraging information like customer loyalty and past interactions with the OEM brands, presenting a targeted incentive offer will entice them to make the purchase online. This will positively impact customer satisfaction, improve conversion rates, and save on the marketing and incentive costs. This personalization should carry throughout the car buying journey, including the test drive where the customer preferences like seat settings or Spotify playlists can be preset in the car. The car's virtual assistant can welcome the customer by name and highlight features based on the persona. The virtual assistant can enrich customer 360 data with feedback during the test drive that can also help cross-sell/upsell additional services or features in the car. Solution Salesforce's Marketing, Commerce and Customer 360 Cloud platform provides an ideal response to the hyper-personalization needed to bring an existing customer and prospect buyer by providing an engagement engine which enables OEMs to create targeted sales promotions, incentives, campaigns and post sales retention solutions. Customer 360 Provides a "Gold Record" based on a concept of Global Party Id (GPID). GPID is a unique identifier describing a sell-to, market-to, or service-to relationship. Audience builder within the C360 platform enables granular-level segmentation to drive various campaigns. Marketing Cloud Marketing Cloud can take the segmented data from C360 and further refine subscriber data by applying finer, more granular segments based on subscriber attribute data (such as lifestyle, color preferences, and family structure). This level of hyper segmentation allows Marketing Cloud to define journeys and dynamic content to drive the journeys. Marketing Cloud enables campaign effectiveness, open rates, click rates, image/color/URL effectiveness, A/B testing and opt-In, opt-out capabilities for GDPR/CAN-SPAM compliance. Commerce Cloud Using the same GPID generated in C360, used in Marketing Cloud and if a prospect/customer lands at an OEM website for sales, services, the GPID brings end to end linking of campaign effectiveness and resulting in sales and support transactions. This is a platform where Wipro Salesforce Practice "Click-Shift-Buy" solution also

gives prospects an immersive buying experience, using a seamless AR/VR experience for car buying. Industry: Hassan Syed Hassan is an IT executive with over 20 years of leadership experience in leveraging technology and people to transform and grow small to large scale businesses. Hassan holds five Salesforce certifications, two Conga Certifications, and several others from Apttus and Vlocity. Hassan is an expert in starting new business ventures from Lead to Cash functions and has built large teams in North America, Europe, Asia (India, Malaysia), and South America (Mexico, Brazil) with a sharp focus on execution across organizational KPIs and metrics. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/joe-shearer/ ---- Contact Wipro Blogs By Author 2021's Top Emerging Tech Trends and Why You Need Them Please fill the required details to access the content Joe Shearer Joe Shearer Joe is a Content Writer at Appirio. A 20-year veteran of the writing and editing game, he has produced high-performing content for a variety of brands. The

### 2021's Top Emerging Tech Trends and Why You Need Them

---- Arcticle source ---- https://www.wipro.com/blogs/joe-shearer/2021s-topemerging-tech-trends-and-why-you-need-them/ ---- About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content 2021's Top Emerging Tech Trends and Why You Need Them July | 2021 The one constant in technology is change. Tech evolves so quickly that it feels like by the time you install the latest and greatest tech package, it feels as if it's already obsolete, replaced by the next big thing. But now all the rules are out the window. A digital awakening is taking place, and CIOs recognize that the tried-and-true strategies of yesterday will likely sputter today. It's also important to remember digital transformation isn't about being on the cutting edge of the latest innovations. It's about serving your customers as efficiently as you can, and "trends" only extend as far as being tools to help your business thrive. Developing ethical artificial intelligence The data companies collect is often sensitive and important to the people it belongs to, and handling it maliciously, carelessly, or with the intent of distributing it willy-nilly is problematic. AI gives companies a whole host of new freedoms and abilities, and many companies have gotten so excited over this tech tool, they haven't stopped to consider the damage that data can do in the wrong

hands, or when used for the wrong purposes. As a way of providing some guidance, Harvard Business Review outlines a seven-point plan for operationalizing AI ethics and data. Today, consumers have a much more values-based approach to their data. Their expectations are shifting toward a more ethical way of handling it. No longer do we expect our email addresses, social security numbers, and other datapoints to be scattered across the Web, going to the highest bidders. Companies are starting to catch up and are considering their technology's ethical impact. The trends suggest that both consumers and businesses will seek out partners who are committed to the ethical handling of data and ignore those who are not. Revisiting and revamping automation roadmaps If you're not already automating processes, you're behind guite a bit, especially as we enter the first full year of the pandemic. Automating the customer experience (while maintaining a personalized approach) should be standard procedure for most companies, but in the remote work environment, it's time to push forward. COVID-19 is altering automation agendas rapidly toward backoffice processes and creating business resilience. Intelligent automation infuses robotic and digital automation processes with pragmatic AI and lowcode tools that help businesses increase efficiencies and resilience while expanding operations. This reduces disruptions, boosts fulfillment strategies within remote work environments, and enables increased flexibility in both front- and back-end operations. Reducing employee work wherever possible is your next step in becoming a fully streamlined company. Creating hyperlocal business operations As the online world continues to push us to a global business model, businesses are increasingly looking to rein things back by creating and cultivating a hyperlocal strategy. Businesses looking to break into a new market will employ existing local businesses to meet the on-demand needs of customers via a digital platform. A common example is for delivery services like DoorDash or GrubHub. Each of these businesses hire local drivers to pick up food at local restaurants, then make deliveries to their customers. Large enterprises continue to tweak and hopefully perfect their hyperlocal operations, while regional midsize businesses are also growing and expanding to new geographies. Employing local shops gives them the ability to serve a new community under their existing banner without a lot of the infrastructure required by traditional growth models. But a hyperlocal strategy still will allow organizations to design architectures that can expand customer engagement and business operations to new geos while keeping centralized technology management benefits. This will allow penetration into those new hyperlocal markets without much of the overhead necessary in days gone by, and will promote growth of the individual company as well as the community it's entering. Innovating with cloud-native tech Certainly, one of the key developments of the next five years is emerging cloud-native technologies and the new innovations that will come along with them. Coming from open source and incubated in public clouds, cloud-native tech drives innovation quickly, and in more locations than in the public cloud. Cloud-native tech will usher in a new era of distributed enterprise software from cloud providers, edge providers, and software vendors. All of these will expand the capabilities of the technology significantly and lead to greater adoption. Edge computing using cloud-based strategies New edge computing breakthroughs in the past year have broadened the appeal of edge computing, pulling it out of its historical attachment to the Internet of Things. Innovations like next-

generation communications, cloud-native technologies, and new edge computing architectures have created new frameworks in which edge computing has proven useful. This trend will continue over the next several years as firms shift their cloud strategies to include edge services on a larger scale, creating a viable alternative to public cloud vendors. The emergence of 5G and the Internet of Everything will lead to a greater number of connected smart terminals, and cloud computing capabilities will shift away from traditional cloud computing centers to edge nodes and terminals. This article from Alibaba Cloud discusses how these new developments have shifted the scope of edge computing, allowing it to grow in the expanded 5G era while maintaining security, autonomy, and flexibility to handle the increase in demand. Interested in learning more about 2021 technology trends? Drop us a line today. Industry: Joe Shearer Joe is a Content Writer at Appirio. A 20-year veteran of the writing and editing game, he has produced high-performing content for a variety of brands. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/michael-brumitt/ ---- Contact Wipro Blogs By Author Bad Customer Experiences Drive People Away. So Does Bad Content Please fill the required details to access the content Michael Brumitt Michael Brumitt Michael Brumitt is a Communications Specialist at Wipro. As a writer and editor, his career has focused on creating engaging content that helps people solve problems, and his experience includes everything from ebooks to traditional print-based publications. He currently lives in Indianapolis. When we talk about customer experiences, the focus is usually on the technological side of things. ================

#### Bad Customer Experiences Drive People Away. So Does Bad Content.

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Developer Productivity Please fill the required details to access the content Bad Customer Experiences Drive People Away. So Does Bad Content July 2021 When we talk about customer experiences, the focus is usually on the technological side of things. Customer experiences are often framed in terms of the various devices being used, the gathering of data from different sales channels, and customers having unified, seamless interactions at each touchpoint. That's no small accomplishment, and it's growing in importance. Yet you may be overlooking a major component of the customer experiences you provide: the actual content you offer. A brand may have a completely brilliant CX strategy happening across social, mobile, and Web, but content that's poorly written or doesn't match your brand's identity can sabotage any other great work you've done. Let's say you're promoting your latest blog article via a link on Facebook. When people click the link to read it and find something derivative and unoriginal, or wildly different than your brand's style, that will leave a bad impression. They'll likely feel they've wasted their time and that you can't be trusted to provide something relevant or worthwhile. They may reconsider how they feel about your brand and the Unfollow button starts getting clicked. Once you've given that impression, it's hard to win people back. So, content can make or break your customer experience as much as tech glitches can on a website or on social media. Doing a good job across all your channels is vital, and when it comes to content, a few rules of thumb can help you deliver a strong message at the right time while avoiding the typical pitfalls. Bad content is a pretty broad term, so let's start by looking at some specific mistakes to stay away from. Just as someone who only talks about himself is a complete bore, content that functions the same way will cause readers to close that tab and move on. Many companies devote a lot of time and effort to discussing how great their products and services are, which isn't necessarily a bad thing. There's no reason why a brand shouldn't let people know what they do well. The mistake they make is that they don't explain how they can help customers solve problems and make their lives easier. want to have a consumer read over a web page or a blog article and at the end of it think, "That's all really impressive, but I don't see how you can help me." Put yourself in the place of your target audience and the issues they're struggling with. They're looking for someone to help solve their problems. When looking through the different options, they want to guickly find someone who knows their concerns, offers clear solutions, and has a record of success with the customer reviews to back it up. You might have a software product that provides a variety of groundbreaking capabilities, but if you can't directly convey how it can solve consumers' problems, you'll be missing a great opportunity to draw them in. When the consumer is essentially invisible because you're only focused on yourself, you'll be hurting your chances to make a lasting connection. The content you create should be a way to answer people's questions, not create more. When someone accesses your site, that person should be able to get a clear idea of what your brand does, who your target market is, and how you're different than the competition. If you try to impress people with convoluted terminology or rely on trendy buzzwords everyone else is using, you'll likely increase your bounce rate and fail to convert. Your web content is a great way to hook potential customers, so it's important that you balance being informative while showcasing your brand's style. Don't make someone scroll through a page and only have a vague idea of what you do and how you can

Also, make sure you've got all the essentials covered as far as spelling, grammar, capitalization, and other writing fundamentals. A genuinely thought-provoking article with great insights can look really amateurish when it's full of typos or punctuation mistakes. should also be consistent with your brand's style guide, which should cover both visuals and content. For your writing team, a style guide specifies the tone and style of each form of content you produce, from blogs to press releases to email newsletters. It would also break down the purpose and tone of each content project, whether formal or conversational. If your content team doesn't already have a style guide in place, consider working with a branding agency to create one. Finding the right amount of content can be tricky, and many brands tend to focus on long-form content since that's what the SEO gurus recommend for driving traffic. Because of that, many blog articles out there require a major time commitment to read in their entirety, and not many people have that much time on their hands. Bare-bones web content or short blog articles that just skim the surface of a topic will also prompt people to bounce and look for something more The topic, your market, and your audience will all dictate the length of your content and what kind of depth you should go into. Using your best judgment is the best way to go, and keep the primary content goal in mind: to interest someone in learning more about your brand and moving them closer to taking a desired action. Now let's consider what you should be aiming for in the content you create: The estimates vary, but you basically have a matter of seconds to make an impression on your site visitors before they decide to stay or go. In that amount of time, your content and design will have to work together to convey everything you need to. As stated earlier, your content should show people how you can help them. That means mentioning your audience's common challenges and the ways your products can solve them. When site or blog visitors see that you understand their main obstacles, and that you have strategies for overcoming them, they'll be interested in learning more. Also, be careful not to talk over people's heads. Speak to them in a way they'll understand and respond to. When your content makes a strong argument that your business is the one that will help them solve their problems, you'll have a good opportunity to see your leads increase. When it comes to web content, people will arrive looking for specific information. What kinds of products do you offer? Who have you worked with in the past? What's your culture like? What are your brand's values? While following the previous rule about not being focused on yourself, you'll also want to ensure you give people something substantive that will convey your leadership and expertise. You won't need to go into tremendous detail. You can leave that to actual conversations as you move people toward a sale, but informative content should be a central priority. Content that's informative can boost traffic, but content that's both informative and interesting can achieve a lot more. Engaging people is what all content should ideally achieve. It should give people the information they're looking for, but also use some personality and style to create a connection with people. These kinds of connections also strengthen your ability to stand out. Your competitors may offer products similar to yours, and when a consumer is making a decision between different brands, she'll choose the one she feels connected to. When your content answers questions, conveys your brand's values, and shows some creativity, you'll have a good chance at creating that connection and keep

your audience coming back. The content you provide should be the beginning of an engagement with your target audience. After you've impressed people with your content, you'll want to develop a further relationship, and a clear call to action will lead them to download a gated asset, learn more about your organization, or set up a meeting with your team. The CTA itself should also be easy to find and appear in an effective location at the conclusion of the content. It's also best to offer a single CTA, rather than giving readers a series of choices. Once you have someone hooked, you should make it easy for her to take the next step to further connect with you. As consumers, none of us wants to go through a frustrating customer experience, and neither do we want to click a link to find something irrelevant or confusing waiting for us. The content you provide, whether a blog post, an e-book, or landing page, is a way of presenting your brand identity in conjunction with the products you offer. It's an essential factor in the customer experiences you deliver, and when done correctly, it can help people identify with your company and create brand enthusiasts. Be sure to look at the full spectrum of what customer experience means. You not only want to ensure that you're giving people a unified experience from one device to another, but that you're also offering quality content that's smart, engaging, and to the point. Ready to put these content tips to use? Make sure you also know and you'll have a solid foundation for delivering compelling content that raises the profile of your brand. Industry: Michael Brumitt Michael Brumitt is a Communications Specialist at Wipro. As a writer and editor, his career has focused on creating engaging content that helps people solve problems, and his experience includes everything from e-books to traditional print-based publications. He currently lives in Indianapolis. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/teresa-traub/ ----- Contact Wipro Blogs By Author The

### The Discovery Phase: Your Guide to Seamless Implementation

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experts, turn your 'art-of-the-possible' customer experience ideas into reality. Art of the possible is a rapid approach to visualizing future-state "blue sky" thinking that can help shape and guide your digital strategy. This key step focuses on business process, design, and technology, creating a blueprint for business and technical solution recommendations, epic development, and application design. CAPABILITIES - Our customer and employee journeys help us determine what capabilities our clients need to create better experiences. Capabilities can include technology, process, data, engagement channels, and even people or personalities. EXECUTION ROADMAP - A structured prioritization effort applying experiential, financial, and other measures to the future-state customer experience recommendations. The effort is determined by technical and/or organizational dependencies and developing an actionable roadmap to drive downstream project work. This effort includes matching the technology and change management work to the delivery method -- such as crowdsourcing, remote, or traditional project models -- that best fits. A discovery phase helps business leaders define their goals and how they're going to achieve them. An objective third party can facilitate communications, overcome obstacles, and encourage stakeholders to collaborate and prioritize work based on budget. Just like you can't build a house without a blueprint, you can't successfully implement new technologies and inspire adoption without a long-term vision and roadmap. Have guestions about The Discovery Phase? Let's talk. Industry: Teresa Traub Teresa (Tere) Traub joined Appirio after 20+ years of building and scaling global businesses. In her most recent role, she helped the University of Texas System develop an educational marketplace on the Salesforce platform. Before that, she managed B2B and International Outreach and Admissions groups and was also part of the EdTech Innovation Group at Kaplan University. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

www.wipro.com/blogs/jasjit-kang/ ---- Contact Wipro Blogs By Author Building a Resilient HR for the Future of Work Please fill the required details to access the content Jasjit Kang Jasjit Kang Vice President HR Services. Health, Insurance, Business Platforms, Banking and Financial Services Jasjit leads global delivery for Wipro HR Services, Health Care and BFSI. He is responsible for client relationship, operations and growth for these practices. Prior to this he was the managing director for Alight's operations in Asia Pacific. Jasjit was Senior Vice President and Business Unit Head for the Banking, Financial Services and Insurance (BFSI) vertical at WNS Global Services before joining Alight. With over 28 years of experience, Jasjit has worked in the areas of operations management, technology based innovation, business development and relationship management. He spent seven years in the banking industry with Citibank, Bank of America, ANZ Grindlays, before moving to the outsourcing industry. Jasjit served as the Chairperson for the National Association of Software and Services

### Building a Resilient HR for the Future of Work

----- Arcticle source ----- https://www.wipro.com/blogs/jasjit-kang/building-aresilient-hr-for-the-future-of-work/ ----- About the Author Contact Wipro Please fill the required details to access the content Building a Resilient HR for the Future of Work July | 2021 As the pandemic took gruesome strides across world forcing country after country to go into lockdown, most organizations across the world were forced to reinvent their workplace strategies overnight. Caught in the eve of this storm was the HR function, which had to respond and adapt immediately to the new normal. This required mobilizing teams to solve challenges of remote working, and lead people through periods of crisis, change and uncertainty in order to ensure that the business could keep the engine running. For the CHRO and their teams, 'resilience' is characterized by the ability to co-create change in a way that it empowers individuals and teams while inspiring a future for the organization that constantly evolves and matures. We believe the forwardthinking HR is a by-product of the pandemic, which has been crucial to steering businesses through the present uncertainties and disruptions. Today's workforce is more complex than ever. The dynamics of the workplace has witnessed rapid change in the past few years. The employee expectations too are evolving with multi-generational workforce bringing in new and different attitudes to work. Today's HR function's role is more complex than ever with more focus on diversity and inclusion, workforce composition that balances full timers to part timers or new gig workers, and reskilling employees in step with industry requirements — all the while ensuring that they keep pace with both ever-evolving technology and complex compliance needs. As we move toward reimagining the HR function in a post-pandemic world, the old rules will need to give way to a model that is more flexible and responsive, one that is built around the four interrelated forces: intelligent recruitment, multi-gen talent management, unified payroll, and personalized benefits and well-being. In our playbook on Resilient HR — The Future of Work Needs a Resilient HR. Are You Prepared? — we demonstrate how a proactive approach by the HR can empower the reinvented digital workplace. Industry: Jasjit Kang Vice President HR Services, Health, Insurance, Business Platforms, Banking and Financial Services Jasjit leads global delivery for Wipro HR Services, Health Care and BFSI. He is responsible for client relationship, operations and growth for these practices. Prior to this he was the managing director for Alight's operations in Asia Pacific. Jasjit was Senior Vice President and Business Unit Head for the Banking, Financial Services and Insurance (BFSI) vertical at WNS Global Services before joining Alight. With over 28 years of experience, Jasjit has worked in the areas of operations management, technology based innovation, business development and relationship

management. He spent seven years in the banking industry with Citibank, Bank of America, ANZ Grindlays, before moving to the outsourcing industry. Jasjit served as the Chairperson for the National Association of Software and Services Companies' (NASSCOM) Global In house Centers (GIC) for the North India region. He has an MBA from Central Queensland University and Arcticle source ---- https://www.wipro.com/blogs/ishan-srivastava/ -----Contact Wipro Blogs By Author Engineering Services Can Make Future Products Better Please fill the required details to access the content Ishan Srivastava Ishan Srivastava Strategy Consultant, ER&D, Wipro Limited Ishan Srivastava is a strategy consultant with the Engineering, Research and Development (ER&D) group at Wipro. He helps define key ER&D strategic initiatives and their operationalization. Earlier in his career, he was part of the team that pursued large deals and managed partnerships for ER&D. Ishan holds an MBA from IIM Bangalore and BTech from IIT Madras. Industry 4.0 will merge the physical and virtual worlds. Navigating this fundamental change requires new skill sets and insights. Here's how engineering services can help you succeed in the next industrial revolution.

### **Engineering Services Can Make Future Products Better**

----- Arcticle source ----- https://www.wipro.com/blogs/ishan-srivastava/ engineering-services-can-make-future-products-better/ ----- About the Author Contact Wipro Related Blogs Connectivity and Interoperability: Realizing the Full Potential of Comprehensive IoT Solutions Strategic Partnerships Will Drive 5G Success for Communications Service Providers Using IoT to Create an Intelligent Enterprise Please fill the required details to access the content Engineering Services Can Make Future Products Better July | 2021 Customer expectations evolve with time, changing the nature of the products and services. Today's digital products/platforms have completely revolutionized the way we think, live, and consume. They've also redefined how service is delivered and what delivery looks like. For example, a virtual vs physical shopping cart, a recommendation engine vs a salesperson, or a streaming platform vs a DVD. To stay ahead of competitors and continuously develop and improve products, companies must look for ways to simplify their processes and portfolios. Speed and efficiency are critical, particularly where hardware and software are deeply intertwined. Companies can choose to do it all in-house, or they can partner with experienced engineering service providers. Where Industry 4.0 is concerned, however, engineering service providers offer a clear advantage. Why Use Engineering Services in Product Development? Engineering is the process of building products, platforms, and technologies. "Engineering services" typically refers to the bundle of product/process-related expertise and services provided by a third-party provider. These engineering service providers can help product companies improve their product-making ability. There are two types of providers: Product companies may choose to outsource work to engineering services firms for many reasons, but most organizations choose

to partner for access to the depth of product-development experience and process-management expertise. Figure 1: Benefits of Engineering Services on Product Management Engineering services firms help product companies with all aspects of making and launching products. Based on their experience with similar companies across sectors and geographies, the firms' help can range from improving processes inside a company to leveraging market-leading partnerships and academic collaborations. Figure 2: Benefits of Engineering services on Product Launch A good product is an outcome of an integrated strategy. Some companies may have tens or hundreds of products requiring a solid strategy to manage the complete product portfolio. An effective strategy needs relevant technology standards, partnerships, compliance, and access to the right markets. Success is not only driven by how good the product is, but by the quality of the product ecosystem. Engineering services firms can help by establishing the latest proven strategies in models, frameworks, and product lifecycle management. Engineering Services in Industry 4.0 Engineering services partners can deliver particular value for companies working with Industry 4.0 principles. This new industrial revolution is creating a fundamental change: merging the physical (devices) and virtual (software systems) worlds. In this merged world, products and their means of production get networked and can "communicate," enabling new ways of production, value creation, and real-time optimization. While productivity gains like reduced production time and better utilization are Industry 4.0's more commonly known benefits, the approach has an impact in a number of other significant ways. With enhanced production time, increased asset utilization, and augmented inventory management, productivity gains will be realized. The use of sensors to monitor production processes and correct errors will improve product quality. Machines and robots will be smarter and more flexible, able to execute various production steps. And all of these benefits will result in faster time to market. Additional advancements will be seen throughout the work environment. Automation will improve safety and ergonomically adapted workstations will promote better working conditions. Collaboration will increase with the availability of more data and optimized use of resources will boost environmental protection. All of the new technological gains will support further innovation. Companies will find Industry 4.0 challenging, as new skill sets and insights are required to adopt these profoundly different technologies. Engineering services firms, having worked with organizations around the world, offer unique perspectives on solutions that use these new technologies. Those perspectives help product companies in their journey to achieve a networked state of cyber-physical systems with the associated data infrastructure. Figure 3: Skills Required for Industry 4.0 Product companies can leverage various combinations of these new technologies to create industry-specific solutions. Examples include creating digital representations of physical objects/systems for simulations, creating a network of sensors attached to tools/devices/vehicles for tracking, product experience validation through AR/VR, and prototype creation using additive techniques. An engineering services partner can likely make valuable contributions in each of these cases, speeding the product company's adoption and evolution. Wipro's engineering expertise spans connected products, software, wireless, data platforms, and Industry 4.0. EngineeringNXT is the umbrella for Wipro's engineering-services offerings. Having worked with the world's leading corporations in a variety

of domains, we look forward to helping product companies leverage engineering services to build competitive advantage, implement simplified processes/tools, and create business models for successful growth. Industry: Ishan Srivastava Strategy Consultant, ER&D, Wipro Limited Ishan Srivastava is a strategy consultant with the Engineering, Research and Development (ER&D) group at Wipro. He helps define key ER&D strategic initiatives and their operationalization. Earlier in his career, he was part of the team that pursued large deals and managed partnerships for ER&D. Ishan holds an MBA from IIM Bangalore and BTech from IIT Madras. To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. CSPs are looking to the enterprise (business-to-business) segment to help monetize their investments in 5G. As management guru Peter Drucker once said, "What Arcticle source ---- https://www.wipro.com/blogs/kim-mcarthur/ ---- Contact Wipro Blogs By Author Changing the Future of Australia's Utility Sector through Data and AI Please fill the required details to access the content Kim McArthur Kim McArthur Enterprise Transformational Leader - ENU, Wipro Kim has worked in the utility industry for more than 30 years. He began his career in Canadian nuclear and electrical power system operations prior to leading business transformation journeys in North American and Australian utilities. In his current role with Wipro, he uses his experience to assist utilities in maximizing value while transitioning to the digital utilities of the future. Utilities can now rapidly solve previously 

### Changing the Future of Australia's Utility Sector through Data and AI

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internal process and workflow were tracked manually by error-prone documents that were time-consuming to complete. The company knew it needed apps to digitize these processes, but Paula - the primary app creator - had no coding experience. Using Google's AppSheet no-code app developer, Paula rapidly built ten apps (one in just 45 minutes) to drive paper-based processes out of their field operations. The apps, which have transformed productivity, include: Using Google Glass to empower frontline workers ML and AI technology have now been integrated into Google Glass Enterprise Edition, offering a lightweight line-of-sight display giving frontline workers guidance in the field while performing tasks. Glass not only gives workers access to training videos, instructions, and checklists, it can connect with remote experts, allowing them to 'see what they see,' supporting real-time collaboration and troubleshooting. Research shows that when maintenance workers are fed images annotated with instructions, rather than having to keep switching back and forth between the task and a computer or tablet, productivity increases by 34%. Imagine that result scaled out across all the technical activities currently performed in the field. Using data science to help build a more sustainable energy market A USbased Fortune 500 company is one of the world's leading energy providers, operating out of 15 countries. Its mission is to accelerate a safer and greener energy future. Google is helping this organization accelerate its journey to AI maturity. Early use case examples include: "We won't reach the clean energy future without advanced tools like machine learning." AutoML supports an incredibly rapid development cycle. Google and Wipro have seen customers get proof of concepts up, demonstrating value in as little as 3-4 weeks. With model and bid performance improving over time, predictions are capturing increasing value. Using AI-based threat detection to reduce your attack surface The recent uptick in ransomware attacks on critical infrastructure keeps pressure on utility cybersecurity teams. The Google approach to cybersecurity is to trust nothing. On Google Cloud, utilities have at their disposal an array of tools to reduce their attack surface and protect data and employees: from hardware tokens to AI-based threat detection, from device management to zero-trust networking solutions. Wipro is helping its utility clients use these tools to take a layered approach to security across users, access, data, and applications that help protect every click from malware, data loss, and fraud. No matter what your primary public cloud provider is, utilities can still take advantage of Google data and AI platforms for all these use cases. To discover how quickly you can use Google data and AI platforms to strip out layers of complexity and develop a proof of concept to solve your most pressing problem, contact us. Industry: Kim McArthur Enterprise Transformational Leader - ENU, Wipro Kim has worked in the utility industry for more than 30 years. He began his career in Canadian nuclear and electrical power system operations prior to leading business transformation journeys in North American and Australian utilities. In his current role with Wipro, he uses his experience to assist utilities in maximizing value while transitioning to the digital utilities of the future. www.wipro.com/blogs/milind-halapeth/ ---- Contact Wipro Blogs By Author How to Orchestrate a Successful Multi-Cloud Operations Journey How to Build a Future-Ready Cloud Strategy Injecting agility in applications COVID-19: The need to make business robust and resilient with cloud Top 4 foundational steps to accelerate your cloud-native journey Why multi-cloud

is the way forward and how to avoid its pitfalls Are data center service providers geared up for the new age digital data centers? Please fill the required details to access the content Milind Halapeth Milind Halapeth Vice President of Global Infrastructure Services and Global Head of Cloud Practice at Wipro Limited Milind Halapeth is Vice President at Wipro and heads the Global Cloud Practice in Cloud and Infrastructure services. He works with customers to craft and accelerate their digital transformation journey by blending strategy, technology and new ways of working. He is an avid learner and business IT enthusiast who believes in a cross-functional leadership approach. Milind has played a key role in developing nextgeneration transformative offerings and executing growth strategies at Wipro. An effective multi-cloud strategy can ease an organization's digital transformation journey. Successful and progressive organizations create a command center that thinks like a business to orchestrate their multi-cloud journey. In the last 18 months, businesses have seen the future arrive faster than forecasted. The key to creating and maintaining exceptional applications is not, simply, great development. The COVID-19 pandemic is forcing us to reimagine society, enterprise and governance. Every enterprise wants to become cloud-native. Why multi-cloud is the way forward for enterpises, what are the best practices and challenges for same Today, computing needs amongst enterprises have evolved with them digitizing their businesses and adopting technologies such as SMAC, machine 

# Are data center service providers geared up for the new age digital data centers?

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### Why multi-cloud is the way forward

#### and how to avoid its pitfalls

---- Arcticle source ---- https://www.wipro.com/blogs/milind-halapeth/whymulti-cloud-is-the-way-forward-and-how-to-avoid-its-pitfalls/ ---- About the Author Contact Wipro Please fill the required details to access the content Why multi-cloud is the way forward and how to avoid its pitfalls April | 2018 New cloud innovations that promise greater speed, security, and resiliency are constantly emerging. With abundant choice at hand in terms of cost and capabilities, organizations do not want to be tied down to a single cloud provider. While hybrid cloud enables businesses to take advantage of economies of scale, multi-cloud allows them to steer clear of vendor lock-in and reap the benefits of cost arbitrage, on-demand scalability, and improved redundancy that reduces risk of service downtime. In effect, a multi-cloud strategy opens up myriad opportunities for businesses to pick and choose the best of what different vendors have to offer. Hybrid and multi-cloud adoption is expected to skyrocket in the coming years as growing number of businesses get on the digital transformation bandwagon. According to Gartner\*, Demand for CMP tools that effectively manage across clouds will grow gradually at a 6.6% CAGR through 2021 as adoption of public and multi-cloud usage increases. According to IDC\*\*, by the end of 2018, worldwide spending on public cloud services and infrastructure will touch USD 160 billion. The multi-cloud challenge: A mess or miracle? Going all-in on multi-cloud is far from easy and organizations often realize that doing it single-handedly is unlikely to yield the desired results. That's because the environment is complex on all fronts - from ensuring tight integration between solutions from multiple providers to deciding which workloads should go where and juggling various price points, SLAs, contracts, skills, etc. Ensuring application compatibility across multi-cloud environments, maintaining consistency in IT management, and maximizing existing investments in IT resources and tools, are other concerns when dealing with multiple clouds. A multi-cloud strategy, with its multifarious touch points and challenges, can easily spiral out of control, becoming more of an operational, governance and cost headache than a miracle, if it is not approached correctly. How a Boundary Less Data Center can help rein in multi-cloud challenges A Boundary Less Data Center (BLDC) represents an innovative, breakthrough platform-centric approach to IT service delivery that is workload-centric, automated, software-defined, and enables high resiliency. For instance, BLDC can deliver a software defined cloud through VMware SDDC solution, with underlying infrastructure provided by AWS. The result: enterprises can leverage a scalable, hybrid IT architecture and the operational expertise of AWS's leading public cloud offered through VMWare Cloud, without losing investments in their traditional enterprise datacenters. Leveraging vSphere, VMware NSX, vSAN and vRealize Suite, enterprises can take advantage of virtualized compute, networking and

storage, as well as derive analytics-driven insights from cloud workloads. BLDC presents enterprises with a technology blueprint to run, manage, and secure applications in a hybrid IT environment without the need to purchase custom hardware, refactor/rebuild applications, or modify operating models. Additionally, it simplifies via single pane of glass reporting, capacity management, drives on-going optimization along with chargeback and metering. Want to ensure a seamless multi-cloud journey? Follow these three best practices Leveraging a multi-cloud strategy confers many benefits. Businesses can match the right cloud with the right requirement, side-step vendor lock-ins, and enhance disaster recovery and geo presence. This, in turn, translates to lower capital expenditure and improved security. While emerging technologies such as containers and serverless computing make multi-cloud even more attractive for organizations, the fact is it can get very complex, very quickly. Here are three best practices to make your multi-cloud strategy a success: The way forward for next-generation enterprises is clear. There is no one size fits all approach when it comes to making multi-cloud work for you. The trick lies in crafting the right strategy aligned to your organization's unique needs and phase of the multi-cloud journey. References \*(Gartner, Market Trends: Multicloud Usage Will Drive Cloud Management Platform Growth, Matthew Cheung et al, 17 October 2017) https://www.gartner.com/doc/reprints? id=1-4KKGOTA&ct=171115&st=sb%3fsrc=so 5703fb3d92c20&cid=70134000001M5t

# Top 4 foundational steps to accelerate your cloud-native journey

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on a cloud-native journey. The cloud-native approach to application and service development has tremendous appeal to both traditional and new enterprises because it fosters a deep partnership between business and IT. Cloud-native is the only way IT can deliver the demands of business. But the change is not easy for legacy businesses. There is no switch, knob or slider that an enterprise can use to change "culture". And when the change occurs, it has a dramatic impact on the way IT departments are structured and how they function. The shift from large, monolithic development to a continuous integration/continuous delivery (CI/CD) approach can take months, if not years. The merger between software development and IT operations (that's DevOps for you) can be slow and demands that the enterprise make investment in new skills, tools, platforms and processes. Cloud-native is a prerequisite to this state. To make the cloud-native journey easier, there are four foundational elements that give enterprises a head start. These elements comprise of framing business outcomes, reimagining the organization structure, processes and empowering developers. Frame and execute business outcomes collaboratively Business defines the outcomes they want to achieve. We have also seen revenue generation becoming an integral aspect of a Line of Business' (LOB's) agenda. The means of achieving the business outcomes have to be thought through carefully. In order to be successful, business or the LOBs have their own IT, tools, portals and self-serve models. Meanwhile, horizontal services are managed by central IT. In effect, we have the parallel existence of LOB IT and CIO IT, which can cause tensions. The goals should be to work holistically, collaborate and reduce tension. Successful organizations marry the two, defining specific value streams and metrics within each team, for clearly charted user journeys - such as the business user, developer, platform and operations. Agile teams compose these value streams to achieve successful outcomes. Create a service-oriented organization Organizational structures dictate how systems are developed, layered and managed. The traditional organizational construct has resulted in monolithic applications that are invariably rigid, cannot scale nor adapt to dynamic business demands (see Figure 1 for a graphic look at how organizational structure shape outcomes). This is Conway's Law in action: "Any organization that designs a system (defined broadly) will produce a design whose structure is a copy of the organization's communication structure".1 The cloud-native development paradigm requires a nimble organization that works in smaller teams to achieve business outcomes. Team sizes vary from 2-6 people for small to medium applications. Each team is responsible for autonomous containerized services. Each service uses its own language, framework and run time. Services that belong to an application are loosely coupled, and discover each other in runtime. For cloud-native applications to succeed, each team must assume complete ownership from develop to operate (see Figure 2 for the DevOps way of working). Each service of an application has its own lifecycle, independent of other services. This level of collaboration - that calls for complete independence but seamless operations -- is possible only through an agile DevOps process/culture. Collaboration with business ensures a feedback loop that, in turn, drives a CI/CD pipeline. This development paradigm allows businesses to release newer functionalities to differentiate, faster time to market, and creates a competitive edge. Adopt DevOps way of working The key to adopting a DevOps culture is in operational transparency. Traditionally, there has

always been conflict between the "change-the-business" (development) and "run-the-business" (operations) teams. Now, Dev and Ops teams have to trust each other, collaborate and adopt integrated DevOps practices and redefine success metrics that are key to their businesses (for example, frequency of release, deployment time, failed deployments, etc.). This approach changes the way enterprise business and IT work. It forces the IT operational fabric, along with its underpinnings in technology tools, processes and team structure, to evolve. At the bottom of this change is buyin from leadership. Without leadership engagement and sponsorship, the change cannot be driven or sustained. Empower developers with the right stacks and CI-CD For the approach to work, enterprises need to standardize the required technology stacks including languages, runtimes and DevOps processes. Connecting these to automated pipelines simplifies the complexities of agile delivery. In most enterprises, developers have to deal with multiple technology stacks, fragmented processes and tool choices that potentially blur continuous delivery automation. These need to be replaced or integrated into newer processes. Next, enterprises need to examine the bottlenecks and wastage in the current delivery pipeline. A good start point is investing in deployment automation and progressively maturing towards continuous deployment using cloud-native templates or Infra-as-a-Code best practices. It is equally necessary to focus on accelerating automation in CI or the build, test and release processes (these also become excellent success metrics to track for the DevOps team). Finally, build the foundational processes such as source control, repo, registry, security, configuration and release management into the pipeline approach. To back this, enterprises would benefit from setting up an independent Cloud Native COE that has a single charter: Of driving the changes mentioned above within the enterprise. The COE should be entrusted with defining the goals, guidelines, best approaches and practices to pivot the enterprise on its cloud-native journey. In the next blog in this series, I will highlight the additional steps that an enterprise needs to take to accelerate its cloud-native journey. Reference 1- https://en.wikipedia.org/wiki/Conway%27s law Related reads: https://www.wipro.com/blogs/tom-richer/5-key-elements-of-a-cloud-nativeapproach/ Industry: Click here to download your copy of State of IT infrastructure report 2020 Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business 

#### COVID-19: The need to make

### business robust and resilient with cloud

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their license inventory and move to a subscription-based pay-per-use model. The more ambitious enterprises can go further by using cloud credits to fund POCs and their "essential" services initiatives. For example, several banks have containerized their applications to remediate end-of-life issues around OS, improved compute density and rationalized OS licenses for cost savings. Some enterprises may wish to outsource their value streams to increase savings. COVID-19 will be a catalyst for enterprises to embrace cloud. Once they have set out on the cloud journey, there will be no turning back. Cloud is in use everywhere, from our cars to our screens; streaming and real-time services are hard realities in everyday life; businesses need to churn vast amounts of data and drive insights if they want to remain competitive. All this, and more, can only be enabled by enterprises if they build the right capabilities to back their cloud strategy. References [i] https://techcrunch.com/2020/03/22/ibm-amazon-google-and-microsoftpartner-with-white-house-to-provide-compute-resources-for-covid-19research/[ii] https://azure.microsoft.com/en-us/blog/update-2-on-microsoftcloud-services-continuity/ https://www.codemotion.com/magazine/dev-hub/ cloud-manager/cloud-computing-covid-19/https://ischool.syr.edu/infospace/ 2020/04/01/suddenly-essential-infrastructure-cloud-computing-resources-atthe-forefront-of-the-covid-19-crisis/ Industry: Click here to download your copy of State of IT infrastructure report 2020 Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business 

#### Injecting agility in applications

---- Arcticle source ---- https://www.wipro.com/blogs/milind-halapeth/injecting-agility-in-applications/ ---- About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Injecting agility in applications May | 2020 The key to creating and maintaining exceptional applications is not, simply, great development. A truly brilliant application accelerates the delivery of features, benefits and outcomes. Agile and DevOps are two paths to this goal. However, cloud-based microservices models are also widely used to inject real-time agility, flexibility and scalability into applications Getting the ground work in place How do organizations begin to steer themselves towards application agility? The first step is to examine the entire application portfolio and segment it across

various parameters. Applications cannot be segmented based on technical value alone. Key parameters such as business criticality, effectiveness, differentiators, growth, maturity and business outcomes should also be considered. Further, applications must be examined to see if they are monolithic, microservices-based or candidates for software-as-a-service (SaaS). This exercise provides an opportunity to determine the value streams each application creates. In turn, it becomes easier to determine which application must be migrated to a cloud-based microservices model. An example of this is a hotel application that leverages Virtual Reality (VR), making it easier for customers to decide which room to book. Now consider that the same hotel also has access to rich customer data that allows it to sell rooms directly and reduces its dependence on Global Distribution Systems (GDS) and Online Travel Agents (OTA). If the hotel benefits more from the second application, that should be prioritized for containerization, microservices and for the Continuous Integration-Continuous Development (CI-CD) pipeline. Organizations have numerous other options before them. One of these options is to break a monolithic application into smaller microservices and expose them via APIs to inject agility into key service functionalities. For example, a heavy load SQL server used for data processing and storage can be broken into components for data processing (Apache Spark), storage (S3) and frequently used queries (Redis Cache). The dominant trend today is to use a microservices pattern to build tomorrow's cloud applications. This architecture leverages multiple services created in response to specific business needs. To succeed, it's necessary to ensure these loosely coupled services collaborate and interact with each other based on policies and dependencies. In microservices architecture, centralized management is kept to a bare minimum. Therefore, effective rules-based communication between services is critical. The bedrock for achieving this is to automate everything, from day one setup to day two run operations. There are three other factors to bear in mind when making your applications agile: move on from traditional ESB to cloud native middleware, focus on multi cloud management and keep an eye on immutable infrastructure. Modernizing middleware for cloud native For enterprises that use middleware to bind applications with data and users now is a good time to update from Enterprise Service Bus (ESB) to cloud native middleware. Although ESB technology has several advantages it has failed to keep pace with the needs of modern application development. As organizations shift to a cloud native strategy, moving middleware to the cloud can be tricky. Instead, cloud native middleware works with CI-CD, observability and cloud orchestration tools. It therefore makes a brilliant fit for today's application development needs. Cloud services also provide most of the middleware capabilities that organizations desire, while some would want to opt for Middleware as a Service (MWaaS) offerings. These offerings are designed to meet the needs of containers and microservices. In reality, organizations, for a variety of reasons, do modernize their existing middleware as well to enable a microservices approach. The considerations for doing this include a cost-benefit analysis and an assessment to see if the ESB business logic and code is stable or it needs change to drive speed and agility. The approaches to modernize can be phased: However, business needs sometimes force enterprises to ignore a phased method and adopt a Big Bang greenfield approach to cloud native microservices leveraging event-based architecture such as Azure functions. This allows organizations

to transition from a central heavy-weight ESB to a light-weight cloud native middleware for use by interested self-contained microservices. Multi-cloud management Cloud native based microservices led development and monoliths running in containers with CI-CD are gaining momentum across enterprises. This requires enterprises to gain expertise of IaaS, PaaS and CaaS on multi-clouds. In addition, while it is easy to provision a server or two on cloud, a shortage of top-level cloud skills makes it difficult and time consuming to supply and maintain a number of complex services across a multi-cloud environment. This is one of the key reasons why code should be written to describe the desired state of a cloud system. Using Infra-as-a-Code (IaaC), which is automation by another name, is therefore recommended and is gaining traction. Cloud native provisioning, securing and managing infrastructure are not going away soon. The challenge is that when managing cloud native infrastructure for CI-CD DevOps, the tools remain fragmented. In addition, there are a variety of deployment models on multi-cloud presenting options between first-party and third-party tools. This places a significant burden on enterprise IT and/or service providers to decode the underlying offerings of the infrastructure and allow businesses to consume services via a single catalog (making it similar to a PaaS offering). Containers on immutable infrastructure The importance of immutable infrastructure in the context of containers and CI-CD cannot be emphasized enough. Immutable infrastructure and the level of self-healing at the application level is foundational to microservices architecture where repeatable processes need to scale. Immutable infrastructure makes it possible to control how containers interact. The interaction between containers is core to how microservices are strung together. Kubernetes takes this to the next logical level by providing a platform that schedules, manages and scales containers to match the desired state of the application. Traditionally, tools are used to maintain and/or update application servers. Eventually, over several iterations, the server state drifts, making it almost impossible to manage it efficiently. Immutable infrastructure is the solution —the concept dictates that servers should be rebuilt when required instead of being updated or adjusted. There is no denying that great application design is a necessity. But in a cloud native environment, it takes an understanding of several additional factors to guarantee application agility. References https://rollout.io/blog/immutable-infrastructure/ https://dyn.com/ blog/kubernetes-what-is-immutable-infrastructure/ https://thenewstack.io/ esb-migration-qa/ Industry: Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. ===============

### How to Build a Future-Ready Cloud Strategy

----- Arcticle source ----- https://www.wipro.com/blogs/milind-halapeth/how-tobuild-a-future-ready-cloud-strategy/ ----- About the Author Contact Wipro Related Blogs Cloud Economics: Driving Business Value Through Discipline De-Risking Mainframe Modernization for the Banking Industry The Day After: De-risking Legacy Modernization Please fill the required details to access the content How to Build a Future-Ready Cloud Strategy 5 critical factors to ensure long-term business value July | 2021 In the last 18 months, businesses have seen the future arrive faster than forecasted. They are being forced to transform at scale and at an unprecedented pace. This is extremely challenging, especially for industries laden with technical debt. But the pressure to act is immense because putting off transformation undermines growth and competitiveness. Most have found a path that has an early payoff—they are hastily migrating workloads to cloud in a bid to scale, bring down costs and put resilience into operations. These businesses need to pause a moment. They must shift their vision from short-term thinking that solves problems for the next 18 to 24 months to program thinking that sets the stage for long-term growth. Now is the time to cement an IT strategy that places building for the future ahead of building it fast. The wisdom in long-term thinking has always been welcomed by businesses. However, bringing clarity to the ideal end state and devising an approach with measurable business outcomes is daunting. Reason: Modernizing IT has many moving parts that go well beyond acquiring available and pay-as-yougo infrastructure. In a recent round table discussion, that I had the privilege to attend, with highly experienced leaders from global customer organizations and Google Cloud, everyone agreed that it requires prudent planning combined with patience. The planner's goal should be to deliver value beyond scalable infrastructure and the promise of lowered total cost of ownership (TCO). It should be to boost enterprise agility and set the foundation for new business models contributing to top-line growth. Targeting these broad-vision goals is not easy. Our conversations with clients using cloud as their stepping stone for transformation shows that their #1 priority is to move services to cloud as quickly as possible. This is good, but the essence of modernization goes deeper. It needs an enterprise to rationalize and modernize applications and networks, review enterprise architecture, address data sovereignty and usability, strengthen security, reimagine disaster recovery, figure out the right landing zones on cloud, and develop the required foundational capabilities through process reengineering and talent upskilling. It also means getting all the stakeholders on the same page, showing them what a competitive and growth-oriented future looks like. These are fiddly and complicated moving parts. They often get sidelined in the haste to migrate to cloud. In the long term, the rush to migrate has the effect of only moving technical debt from Point A to Point B with the additional risk of doubling the TCO. Moving to cloud? Plan for the future. The rewards of using immaculate planning to pursue these varied components of modernization are significant. The pharmaceutical and

healthcare industry provides an easy-to-understand example of this. The traditional leaders in the industry today have giant, sprawling operations that span the globe. The industry is controlled by varied local compliance requirements (HIPAA, GDPR, GxP, etc). The regulations make it impossible to store and process data where it is required. Planning is the key to getting data and workloads in the right place, without sacrificing agility or competitiveness. Done right, industry leaders will be able to counter local healthcare players who are shifting the profit pools to their advantage. Our experience shows there are five critical parameters that an enterprise must address to become future-ready when investing in cloud: These are critical elements for the success of cloud-related strategies. They allow businesses to go beyond the acquisition of scalable and affordable infrastructure. More important, they play a role in building the foundation for tomorrow's IT organizations with the potential to deliver business value. Industry: Milind Halapeth Vice President, Wipro Milind Halapeth is Vice President at Wipro and heads the Global Cloud Practice in Cloud and Infrastructure services. He works with customers to craft and accelerate their digital transformation journey by blending strategy, technology and new ways of working. He is an avid learner and business IT enthusiast who believes in a cross-functional leadership approach. Milind has played a key role in developing nextgeneration transformative offerings and executing growth strategies at Wipro. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business benefits that come with them.

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### How to Orchestrate a Successful Multi-Cloud Operations Journey

---- Arcticle source ---- https://www.wipro.com/blogs/milind-halapeth/how-to-orchestrate-a-successful-multi-cloud-operations-journey/ ---- About The Author Contact Wipro Related Blogs Cloud Economics: Driving Business Value Through Discipline De-Risking Mainframe Modernization for the Banking Industry The Day After: De-risking Legacy Modernization Please fill the required details to access the content How to Orchestrate a Successful Multi-Cloud Operations Journey October | 2022 An effective multi-cloud strategy can ease an organization's digital transformation journey. Successful and progressive organizations create a command center that thinks like a business to orchestrate their multi-cloud journey. Multi-cloud, which includes private, public, and hybrid clouds, provides enterprises an

opportunity to configure and leverage best-of-breed technology platforms and is the new path to performance. These platforms can be combined uniquely to accurately address workloads, business objectives, and end-user preferences, resulting in agility and exceptional business benefits. The upside is significant, but it comes with a price: organizations are aware that moving their legacy IT into the cloud can be an uphill task, mainly because of the high financial costs and the potential data security risks. Enterprises need new management techniques and capabilities to optimize performance, cost, and security. It is critical that businesses orchestrate an effective multi-cloud operations journey to manage the complete life cycle through the lens of business outcomes. A traditional operation center focusing on architecture, configuration, resource and capacity management, security, and compliance is essential. In addition, enterprises need a command center that thinks like a business. Most business leaders see the value in adding a platform with business outcome governance at the core because it enhances IT; CIOs and CTOs find considerable value in it as it propels IT beyond the typical supply chain role it has come to embody. The new approach to multi-cloud cannot be ignored, especially as the business stakes are extremely high. Every IT decision must be well-considered, and every selection must be aligned with desired business outcomes. A robust cloud strategy is driven by the imperative to orchestrate customer journeys in a multi-cloud operation model with a laser focus on business. The prerequisite of such a vision is a plug-and-play platform that enables smooth and flawless multi-cloud adoption and manages it through its entire lifecycle. It brings Cloud, SaaS, and Disaster Recovery services providers closer to the needs of IT consumers such as developers, enterprise users, and business users. Designing effective customer journeys in a multi-cloud ops model via a single plug-and-play platform An integrated plug-and-play platform for multicloud adoption should be thought of as an 'Enterprise Business Operations Center' (EBOC)—as shown in Figure 1—that closes the gap between IT and business using several building blocks such as business-user enablement, customer-journey management, new services launch, service onboarding, business services blueprints hub, automated operations, technology and business operations, DevSecOps enablement, and governance. An EBOC has the capability to tie these building blocks with multi-cloud ecosystem of providers (AWS, Microsoft Azure, Google Cloud Platform, IBM Cloud, Oracle Cloud). The providers bring their self-service catalogs, provisioning automation, observability, AIOps, FinOps, and Optimization processes to the table. With this, the operations center connects all the dots that enterprises need for multi-cloud success. However, a host of technical capabilities and expertise are required to power the success of the operations center. The capabilities and expertise span service enablement, industry-specific blueprints and solutions, platforms for transformation, scale, and innovation, the ability to drive analytics through AI and ML, cloud-native integrations, critical ecosystem services, and cost management. Collectively, the building blocks, cloud providers, and technical capabilities bring a large ecosystem into play. Experienced enterprises know that friction between too many moving parts in such an ecosystem can quickly erode ROI from their multicloud investments. Enterprises need to manage this ecosystem by leveraging management frameworks that drive cloud-oriented business transformation and combine it with tools and processes that turn the ecosystem into a seamless, single platform. A business service marketplace—the first plane

of the management framework help managers with proactive enablement of technology option and supervision. The second plane, with business analytics, visualization, and data, is designed for various user personas. The third is a control plane with cognitive engines, policies, an API marketplace, FinOps, DevSecOps, and Operations. The depth of expertise behind these three planes determine business objectives and outcomes (see Figure 2) such as the ability to map user journeys, manage agile processes, security, compliance, and integration of OKR, MVP, MCD, DevOps, SRE and API, etc. The framework must be designed to manage the multi-cloud life cycle using industry-specific best practices and business goals to drive decisions. The technology behind the framework can use AI- and ML-based engines that enable observability and optimization of business processes. These technologies, combined with data and analytics, also provide the means to manage performance, cost, risk, and efficiency. Multi-cloud approaches are quickly replacing other strategies to achieve varied business goals. The shift allows enterprises to deploy advanced technologies at velocity without lockins that can impede flexibility, risk, compliance, and growth. Wipro FullStride Cloud Services' Boundaryless Enterprise presents a holistic way to manage multi-cloud complexity. It brings together the entire portfolio of Wipro's cloud-related capabilities, offerings, and talent to help clients align business and IT with the cloud imperative more effectively, create significant business value, and increase competitive differentiation. Milind Halapeth Vice President, Wipro Milind Halapeth is Vice President and Global Head of Cloud Practice Wipro FullStride Cloud Services. He works with customers to craft and accelerate their digital transformation journey by blending strategy, technology and new ways of working. He is an avid learner and business IT enthusiast who believes in a cross-functional leadership approach. Milind has played a key role in developing next-generation transformative offerings and executing growth strategies at Wipro. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code. databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business benefits that come with them. www.wipro.com/blogs/amit-khullar/ ---- Contact Wipro Blogs By Author Financial Crime in the Digital Era: How Indian Banks Fight Fraud and Ensure Compliance Please fill the required details to access the content Amit Khullar Amit Khullar Amit heads BFSI Risk & Compliance Domain consulting at Wipro. He specializes in risk and compliance advisory,

consulting and transformation. He has worked with several large global clients on business and technology initiatives. Every financial services firm –

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banks, investment companies, and insurers

#### Financial Crime in the Digital Era:

### How Indian Banks Fight Fraud and Ensure Compliance

----- Arcticle source ----- https://www.wipro.com/blogs/amit-khullar/financialcrime-in-the-digital-era-how-indian-banks-fight-fraud-and-ensurecompliance/ ---- About the Author Contact Wipro Related Blogs A New Generation Emerges in India's Evolving Payment System For a successful BFSI cloud transformation, build your complex landing zone right Modernizing the Core Banking System: Enabling the Future Please fill the required details to access the content Financial Crime in the Digital Era: How Indian Banks Fight Fraud and Ensure Compliance July | 2021 Every financial services firm - banks, investment companies, and insurers - are wrestling with digital transformation and the many benefits it offers: greater reach, more efficiency, and the ability to deliver better user experiences. But there's a dark side too: Digital can make financial firms more vulnerable to fraud and financial crime. The best weapon is a robust security framework that is fast, accurate, designed to prevent fraud and other crimes, and built to ensure the highest level of compliance, both with internal policies and regulatory mandates. India has been a leader in digital innovation in banking, financial services and insurance by applying technologies like artificial intelligence and machine learning, robotic process automation, blockchain, and advanced analytics. While these technologies obviously impact digital experience, they are also enabling the creation of powerful, efficient solutions for compliance and fraud prevention in areas like onboarding (notably "Know Your Customers" rules), due diligence, transaction monitoring, and more. Financial firms in today's world should want to be "secure by design." They should also understand that the speed and efficiency of modern technology-based risk management compliance systems can hop reduce the operational costs of compliance. Learn more about the challenges and solutions at Fincrime Virtual Week, sponsored by the Association of Certified Financial Crime Specialists, August 2 - 6. Amit Khullar, Global Head of Wipro's BFSI Risk & Compliance Consulting team, will participate in a panel discussion entitled Digital Adoption by BFSI, Fraud Risk and Challenges on August 04, 2021. Industry: Amit Khullar Amit heads BFSI Risk & Compliance Domain consulting at Wipro. He specializes in risk and compliance advisory, consulting and transformation. He has worked with several large global clients on business and technology initiatives. India's payment journey has changed significantly over time. What started as a barter system has evolved into cashless payments Migrating your data and services to a public cloud service like Google Cloud offers multiple advantages, including increased flexibility and agility.... Traditional banks are reinventing themselves to meet rapidly evolving source ---- https://www.wipro.com/blogs/sahil-khosla/ ---- Contact Wipro Blogs By Author Human Resources: The Catalyst for Business Resilience in

the New Normal Please fill the required details to access the content Sahil Khosla Sahil Khosla Group Manager, Wipro HR Services Sahil leads the goto-market team for Wipro HR Services. He has over 17 years of experience in solving HR service needs of global organizations. Sahil provides consultation on human capital management (HCM) services, benefits administration, HR outsourcing, global payroll solutions, and learning and development services. A reassurance that there is a way to survive and thrive through any disruption with agility, adaptability, and innovation.

## Human Resources: The Catalyst for Business Resilience in the New Normal

----- Arcticle source ----- https://www.wipro.com/blogs/sahil-khosla/humanresources-the-catalyst-for-business-resilience-in-the-new-normal/ ----- About the Author Contact Wipro Please fill the required details to access the content Human Resources: The Catalyst for Business Resilience in the New Normal July | 2021 The recipe of resilience starts with "reassurance." A reassurance that there is a way to survive and thrive through any disruption with agility, adaptability, and innovation. Remember the past? There was a time, when a vaccine, on an average, took 10-15 years to develop. The mumps vaccine was the quickest to be developed, but it still took four years. The first vaccine to counter COVID-19 was out in just nine months. This shows the innovation and perseverance of the governments and individuals to reassure the world that we will revive. Companies of today are no different. A black swan event strikes without notice, and organizations must be ready to respond, adapt, and thrive. Today, human resources (HR) is at the driver's seat and enabling organizations to become super agile and innovative and induce these reassurances amongst its most promising and prominent asset — people. Business leaders have recognized this facet of HR. They are making significant investments to strengthen and modernize their HR teams to: Redefining HR to rewrite the new business success story Last year, many businesses underwent a huge change in a short span to respond to the challenges posed by the pandemic. Cloth manufacturers shifted their focus towards creating face masks and alcohol brewers started producing sanitizers. Other businesses have adapted to the new normal as well, including retail chains that were earlier focused on a personalized experience through their physical stores, recently evolved to completely go online. Each business reimagined its expertise and delivered to the situation in the best possible way. Behind all these amazing business success stories stood their HR teams who: New protocols are defining the model of a resilient HR organization. A 5C approach focused on the following key areas is reshaping how HR shall operate going forward: Successful organizations of the future will be quick to react, equipped to adapt, and free to innovate. HR powered by technology will be the catalyst in accelerating business resilience through its cross-functional and cross-cultural expertise, constantly partnering with the workforce and building trust. For more

details on how you can be future-ready with a resilient HR, connect with us. Industry: Sahil Khosla Group Manager, Wipro HR Services Sahil leads the go-to-market team for Wipro HR Services. He has over 17 years of experience in solving HR service needs of global organizations. Sahil provides consultation on human capital management (HCM) services, benefits administration, HR outsourcing, global payroll solutions, and Arcticle source ---- https://www.wipro.com/blogs/aayush-kulshrestha/ -----Contact Wipro Blogs By Author 5G: Taking the Aviation Industry to New Heights Please fill the required details to access the content Aayush Kulshrestha Aayush Kulshrestha Solution Consultant, Enterprise 5G Aayush holds experience in telecom domain and has worked with a leading global manufacturer of telecom and broadband equipment for mobile operators. His current responsibilities involve advisory and consulting on private 5G networks for energy and utilities, oil and gas, mines, travel, hospitality, and the public sector. 5G is an ecosystem play where multiple technologies ================

### 5G: Taking the Aviation Industry to New Heights

---- Arcticle source ---- https://www.wipro.com/blogs/aayush-kulshrestha/5gtaking-the-aviation-industry-to-new-heights/ ---- About the Authors Contact Wipro Please fill the required details to access the content 5G: Taking the Aviation Industry to New Heights August | 2021 While most media tout the impact of 5G on consumers, it's the enterprise world where the technology will really take flight. Yes, 5G will enable video streaming at a high rate, and it will drive consumer services that currently reside in the realm of science fiction. But 5G's underlying capabilities - Enhanced Mobile Broadband (eMBB), Massive Machine Type Communication (mMTC), and ultra-reliable low latency communication (uRLLC) - are ideal for business-critical applications. 5G is an ecosystem play where multiple technologies (e.g. EDGE and SD-WAN) complement and converge. With its vast capabilities, 5G could enable industrial IoT functions, for instance, to finally realize their potential. But where specific industries are concerned, few have the same 5G transformative potential as the aviation industry, which is projected to invest \$3.9 billion in 5G by 2026 - growing at a CAGR of 52.7% from 2021. This projection is entirely justified; 5G will take the entire industry to new heights, from airports and airlines to manufacturers and passengers. 5G's Impact on the Entire Aviation Lifecycle If leveraged properly, 5G deployments will touch every facet of the aviation lifecycle. At a high level, 5G will transform the industry in four primary areas: manufacturing, airports, airlines, and the passenger experience. Manufacturing Before manufacturing even begins, real-time remote simulations are critical for multiple calculations and processing parameters. For example, IoT sensors collect simulation data for aircraft blades, which is then fed back to the machine control to derive crucial insights. 5G inherently accelerates this transmission, enabling manufacturers to perform advanced analytics and simulations sooner to identify and correct faults. Similarly, 5G can provide

manufacturers greater understanding of all its manufacturing processes/ scenarios by enabling digital twins for aircraft blisks. Blisks are complex products that require high transmission rates, high reliability, and high data rates to produce. By deploying a 5G network on the production floor, manufacturers can ensure highly precise blisk manufacturing and real-time tracking capabilities as the blisk moves across the production line. Airports Two common areas of operational concern are security and weather-related tasks. One way 5G can improve airport security is by enabling networkconnected 8K cameras and augmented-reality glasses. Thinking about security differently, 5G could also enable Automated Guided Vehicles (AGVs) to perform full disinfection based on real space occupancy, or allow airports to perform automatic fever detection via real-time thermal imaging. Weather issues, meanwhile, can cause significant operational expense in addition to flight delays. With a 5G network providing high-speed connectivity, airports can monitor runways from the control tower and send autonomous snowploughs to clear the runways, reducing the reliance on on-call drivers. Even the sharing of flight information, seat allocations and terminal data can be improved by 5G, whether through holographic advertisements or other bandwidth-intensive means to divulge dynamic, personalized information in real time. Airlines It's easy to imagine 5G's impact on a structure such as an airport, but the airlines themselves can leverage 5G technology as well. The avionic systems inside airlines, for instance, can have accelerated communication with control towers upon landing via highly reliable 5G connectivity. Also, real-time equipment monitoring using 5G networks can enable predictive maintenance, with 4K/8K video analytics enabling airlines to monitor aircraft turnaround processes. Airlines could also improve their cargo and people movement, with 5G providing the backbone to deploy vertical take-off drones (e.g. electric air taxis) to the nearest location using a smartphone application. Passenger Experience The opportunities are vast to utilize 5G to provide an improved passenger experience. From a logistics standpoint, QR code scanning to verify passengers' identity can considerably reduce waiting periods and long queues. Facial recognition using 5Gpowered glasses and cameras could flag suspicious passengers and/or allow customs authorities to inspect passengers who are crossing borders. Realtime video streaming enabled through 5G could improve baggage control and monitoring, providing passengers with constant monitoring of their baggage during loading/unloading and the flight itself. And 5G-enabled computer vision could enable personalized services such as instantaneous scanning of boarding passes with minimal waiting periods and no manual intervention. When on the airplane, passengers could benefit from a 5Genabled experience by utilizing AR/VR capabilities to access 8K or UHD content, or by tapping into lighter-weight and faster in-flight entertainment services. And, much like they'd enjoy 5G connectivity on the ground, passengers would surely appreciate an in-flight private 5G network for Internet services rather than unreliable (and more-expensive) satellite communication links. Conclusion The sky is truly the limit when it comes to 5G's ability to transform the aviation industry. Whether considering manufacturing, operations, or the passenger experience, 5G is poised to take the industry to new heights. With decades of experience in the industry, Wipro looks forward to designing, building and maintaining 5G-fueled innovations with aviation leaders. Industry: Aayush Kulshrestha Solution Consultant, Enterprise 5G Aayush holds experience in telecom domain and

has worked with a leading global manufacturer of telecom and broadband equipment for mobile operators. His current responsibilities involve advisory and consulting on private 5G networks for energy and utilities, oil and gas, mines, travel, hospitality, and the public sector. Ayisha Patnaik Solution Consultant, Enterprise 5G Ayisha is a part of the 5G Industry solutions team. During her first stint with Wipro, she closely worked around partnerships with telecom operators and was responsible for enterprise content management. Her primary responsibilities in the second stint include advisory and consulting on 5G and IoT portfolio for CPG, Smart City / Communities, Banking & Finance sectors globally.

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#### AI Helps Insurance Companies Make Smarter Decisions

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automated, transform random data into decision-making information, and upgrade pricing capabilities through ML models. In short, they can empower insurance companies to make smarter decisions. How AI Can Reimagine Insurance Processes Taking this game-changing approach isn't hard, but it requires the right AI/automation tools such as Wipro Holmes, and the right expertise. Mindful that thousands of financial-services organizations use Salesforce, Wipro has created a solution based on Salesforce's Financial Service Cloud and Wipro Holmes, our augmented-intelligence platform. For both case handlers and underwriters, the use of AI can automate processes by retrieving data from emails and documents sent by brokers. AI expedites the review process by automatically providing insights about what information needs validation with a complex risk assessment and score calculation. When a broker sends an email requesting a quote for an insurance policy, an AI tool like Holmes captures the email and processes all the information, including from attachments. It could then automatically create a case in a CRM tool like Salesforce, filling-in all the relevant and available information. The case handler would be automatically notified of the request and could review the automatically retrieved information. An automated user interface (UI) supports the entire process, with features such as the ability to visualize where specific data was retrieved, identify external sources used to validate data (like the Customer Commercial Name or VAT Number), or highlight updates sent by the broker during the validation process. Once the validation process is completed, the case is auto-assigned to an underwriter. During this assignment process, the Holmes platform validates all the information available in Salesforce regarding the quote request and the customer. Based on the risk assessment model that was previously configured (for example, it is possible to set up categories and weights), the platform calculates a score associated with this guote. An underwriter can then drill down into distinct categories and evaluate the calculated score to gain more insightful information before providing a quotation for the requested policy. Case handlers and underwriters both leverage Salesforce or another CRM tool to manage the entire process, while an AI tool like Wipro Holmes uses data from various sources to generate insights in the background. Trusted Automated Intelligent Solutions This reimagined process expedites administrative tasks and allows case handlers and underwriters to make faster and smarter decisions. Applicable to most financial-services markets, the solution can also act as a baseline to embrace AI incrementally throughout a company and ecosystem, eventually enabling leaders to extend AI and ML to every business line (e.g. cybersecurity, customer support, or compliance). Historically, insurance and other financial-services companies have struggled to overcome blockers and embrace innovative technologies that can improve their business. Augmented intelligence solutions such as this combination of Salesforce's Financial Service Cloud and Wipro Holmes provide an avenue to achieve significant workflow improvements while demonstrating how to make AI an ally. Industry: Filipe Freitas Portugal Practice Lead and Head of Innovation Center, Salesforce, Wipro Limited Passionate about innovation, product management, and customer engagement, Filipe has been helping customers bring their customer relationship strategy and platforms to the next level of maturity for the past 10 years. His career has been on innovation and product development and building teams that have developed incredible solutions for our customers.

5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the source ---- https://www.wipro.com/blogs/bhaveshkumar-bhatt/ ---- Contact Wipro Blogs By Author Underground or in the Cloud: The Reality of Risk Please fill the required details to access the content Bhaveshkumar Bhatt Bhaveshkumar Bhatt Practice Head - Cloud Security Bhavesh is a Cloud Security Practice Head at Wipro's Cybersecurity and Risk Services. He is a cybersecurity professional with 20+ years of experience in security covering business strategy design, solutions and services development, and program and delivery management across industry verticals. Wipro and AWS had a great interaction over a two-day round table....

### Underground or in the Cloud: The Reality of Risk

----- Arcticle source ----- https://www.wipro.com/blogs/bhaveshkumar-bhatt/ underground-or-in-the-cloud-the-reality-of-risk/ ---- About the Author(s) Contact Wipro Related Blogs Risk in the ESG Age Exchange of Cyber Threat Intelligence Among Peers Using Decentralized Identity Networks and IoFT Cybersecurity through collaboration Please fill the required details to access the content Underground or in the Cloud: The Reality of Risk November 2021 Underground or in the Cloud: The Reality of Risk Wipro and AWS had a great interaction over a two-day round table from September 13 to 15, 2021, with senior security leadership across various industry verticals. This was followed by a panel discussion on day three at the GDS Security Summit titled - 'Building a Positive Security Culture Around the Business'. This article summarizes the discussions and the key learnings from the recently concluded roundtable. Risk is omnipresent and uncontrollable Risk, by its very definition, is deemed uncontrollable; and the need to invest in security is an absolute realization across the board. With new threats emerging constantly, responding to them is becoming costly and time consuming. The roundtable focused on best practices around: Business imperatives and challenges The key imperatives discussed at the roundtable included: Observations and recommendations The way forward for cloud security Security needs to be an enabler to the business rather than a hindrance. Organizations need to understand the tradeoff between a proactive and reactive approach and have a combination of both while defining their strategy for cloud security. Embrace a shift left approach to make sure applications are developed and managed in a secured fashion in the cloud.

Look at applying a combination of some of the recommendations to make your cloud journey secure and build a culture of frictionless security in the cloud. Industry: Siva VRS GM & Global Head - Cloud & Infrastructure Security Practice at Wipro's Cybersecurity and Risk Services Siva is responsible for building security practice, solutions, consulting, delivery and overall strategy. He has over two decades of global experience in heading sales, practice, alliances, consulting, and delivery. Bhaveshkumar Bhatt Practice Head - Cloud Security Practice at Wipro's Cybersecurity and Risk Services Bhavesh is a cybersecurity professional with more than 20 years of experience covering business strategy definition, solution build, design and offering development, along with program and delivery management across industry verticals. A tidal wave of ESG regulations is looming across markets. To prepare, companies are shifting responsibility for sustainability management and reporting to the risk management domain. Risk executives are investing in enhancing their governance, risk management, and compliance (GRC) systems to account for ESG factors. The ability to exchange cyber threat intelligence (CTI) in privacy preserving and in a secure manner is vital for enterprises to manage their security risks effectively. During the pandemic, dependence on digital technologies has seen unprecedented growth. From managing remote workforces to catering for changing customer expectations, the paradigm shift towards digital has Arcticle source ----- https://www.wipro.com/blogs/alan-dodd/ ----- Contact Wipro Blogs By Author The Wipro-Google Workspace-Microsoft Office 365 play at Wipro Please fill the required details to access the content Alan Dodd Alan Dodd Director, Wipro Alan Dodd is the Director of Wipro's Global Google Workspace Practice and European Alliance lead for the Google Cloud alliance, working across Wipro's iDEAS Cloud Transformation Practice and Chief Growth Office. He works with enterprise customers to transform their workplace by bringing the Google way of working through change management and technology to increase their productivity. Alan has played a key role in bringing the best of GCP and Workspace together with Wipro's teams to develop and deliver business focused solutions. Productivity has 

#### The Wipro-Google Workspace-Microsoft Office 365

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Cloud as a tightly integrated set of SaaS applications. And as organizations migrate the original on-premise, local client applications to become native Cloud platforms, Microsoft's Office 365 is adapting to becoming ever more Cloud-based. For many organizations, this poses a challenge. What is the right choice? How will they realize the benefits that both solutions bring? Maybe the answer is that you don't have to choose only one. Here at Wipro, we are bringing both Workspace and Office 365 to our colleagues. To do this well at an enterprise scale, expertise is needed. Wipro has experience in rolling out Workspace in large complex organizations globally. We cover change management, technical implementation, and ongoing support to help realize the benefits of working the Google way. Google recognizes our expertise with our specialization for 'Work Transformation - Enterprise'. Google Workspace has a significant advantage, the ability to run fully functional purely in-browser. Chrome, Firefox, Microsoft Edge, and Safari are all supported with Apps supplied for Android and iOS. Security by Design is at the forefront of Google and Wipro's process. For example, Google Workspace vigorously enforces segregation between work and personal data in BYOD environments, clearly distinguishing between the two environments made in the user experience. The SaaS architecture makes Workspace ideal to provide 'next to' an existing environment, integrating only where needed. Wipro has configured Google Workspace to utilize Wipro's existing Single Sign On (SSO) solution. Users with both Workspace and Office 365 do not have to keep track of multiple user accounts and log on to either system using their corporate credentials. Active Directory: Within Active Directory (AD), every user has a unique attribute used to identify a configuration. Some users keep Office 365 as their primary production environment. Others replace it partially, and some are entirely on Workspace. Even within these, Wipro has specific configurations to allow and govern compliance to the needs of particular business units. Using Google Cloud Directory Sync, users are created and placed in specific Organization Units in Workspace based on the configuration attribute to allow access to a predefined set of applications and capabilities. Unless configured otherwise, every user at Wipro also has a Wipro-managed Google ID without a workspace license to allow fundamental collaboration and signing into Google services. Calendar Sync: Another configuration to be considered has to do with Outlook and Google Calendar. Although it is possible to give a user both, it is better to make a choice. The mail configuration drives this choice. Wipro supports dual-delivery (deliver mail to both Gmail in Workspace and Outlook in Office 365) or chooses between Outlook or Gmail, defined by spilt-delivery. Google Workspace calendar interoperability makes it possible to see free/busy information from Office 365 and Google Calendar. Security and Compliance: Google Workspace builds all of the above into specific configurations. These configurations have specific settings which can limit the options available to end-users and thus meet regulatory compliance requirements. In addition, Wipro has configured Workspace and Office 365 to meet the company's overarching policies to be compliant and secure. Choices for a better employee experience: Experience tells us that it is crucial to make a choice as a user. However, giving this level of granularity allows the end-user to select the environment in which they are most comfortable. We find that our newest employees, often graduating from University, have already experienced Google Workspace and do not need to learn a "new" Office 365 way of

working, resulting in significant time savings and employee satisfaction. Although available side-by-side, many features are not compatible between Office 365 and Google Workspace. Google is making progress in delivering a more integrated solution. For example, Docs, Sheets, and Slides in Google Workspace can open Office documents without converting them. Once stored in Google Drive, these documents can be shared and accessed collaboratively, seamlessly bringing most Google features to Office documents. Once more, the security features of Workspace allow secure sharing of information while retaining ownership of the data rather than losing control by using attachments in email. Nevertheless, it still makes sense to identify teams or groups of users that work closely together and allow access to the same set of tools. Working with documents is one thing but communicating with team members is challenging if one group is on Microsoft Teams and the other group on Google Chat. In that sense, having access to both allows users flexibility, for instance, the ability to collaborate with Workspace while others collaborate with Office 365. With 3 billion users worldwide, businesses perceive Google's productivity and collaboration suite of applications as a perfectly normal way to work together. Universities and schools are increasingly using Workspace, and almost everyone already has a @gmail.com account. Because of this, it makes strategic sense for organizations to embrace multiple platforms to work from anywhere on any device. Startups choose Workspace, where millennials take its availability for granted, driven by the increasing use of mobile devices to perform work and communicate. Giving employees a choice (or both!) is not only a nice thing to do; it is an innovative strategic play to leverage the best of both worlds. The choice for cloud services influences another reason to think about having both Workspace and Office 365. Many organizations no longer choose between Azure, AWS, and GCP they leverage the best of them, utilizing modern solutions like Google Anthos. With this strategy, the end-users can likely harness the power of the Cloud in the application stack that they can access. For example, users can configure Google Sheets to analyze data in BigQuery. Enterprise users have access to DataStudio to provide additional reporting solutions, combining a wide range of data sources. Such capabilities give flexibility and insight in leveraging existing data to bring specific information to end-users directly. So, the hyper-scale choices of where to do what in the 'backend' will likely drive a hybrid collaborative productivity platform. Having multiple productivity platforms makes it easier to adopt and utilize a multi-cloud in the future. Workspace is often the first step into the Google Cloud Platform and is one of the most widely used applications delivered. Google will push Workspace forward as the easy access platform of choice for anyone in the world. Whether you agree with that or not, Google's strategy of making 'Workspace' services available for free to anyone has given them an advantage that is already a factor that many Digital Native companies take advantage of today. Google's focus on Workspace as an integrated, smart, always available, secure and user-friendly platform that is entirely independent of any operating system or device choice. For Wipro, it made much sense. If you would like to know more about the benefits of Workspace for your organization, please reach out to the Google Workspace Practice and talk to our subject matter experts. Industry: Alan Dodd Director, Wipro Alan Dodd is the Director of Wipro's Global Google Workspace Practice and European Alliance lead for the Google Cloud alliance, working across

Wipro's iDEAS Cloud Transformation Practice and Chief Growth Office. He works with enterprise customers to transform their workplace by bringing the Google way of working through change management and technology to increase their productivity. Alan has played a key role in bringing the best of GCP and Workspace together with Wipro's teams to develop and deliver business focused solutions. In the evolving landscape of digital workplaces, efficient field service operations are critical in ensuring reduced downtime... appy employees usually stay at their jobs, frustrated workers often don't. Chief human resource officers (CHROs) tell us that the corporate leave of absence (LOA) process is one of the most common sources of employee frustration. Employees often rank their LOA experiences low on the satisfaction scale, using descriptors such as complicated, confusing, inconsistent, time consuming, and unresolved. In a world where business is evolving at the speed of thought, rapidly changing market conditions pose several challenges for enterprises across industries.

==========================----- Arcticle source ----- https:// www.wipro.com/blogs/manohar-m-g/ ----- Contact Wipro Blogs By Author Digital Simulation Can Improve Automotive Manufacturing Efficiency Please fill the required details to access the content Manohar M G Manohar M G Associate Consultant of Digital Twin, Wipro Limited Manohar is an Associate Consultant of Digital Twin. He has more than 10 years of experience in discrete event simulation software. He is interested in system simulation, modeling, and optimization, for various aspects in manufacturing. Manohar has worked with leading companies in automotive, FMCG, and retail across the globe. He has a Master's degree in Industrial Automation & Robotics and Bachelor's in Mechanical Engineering. Manufacturing processes and supply chains are getting increasingly more complex...

#### Digital Simulation Can Improve Automotive Manufacturing Efficiency

----- Arcticle source ----- https://www.wipro.com/blogs/manohar-m-g/digital-simulation-can-improve-automotive-manufacturing-efficiency/ ----- About the Author Contact Wipro Related Blogs Connectivity and Interoperability: Realizing the Full Potential of Comprehensive IoT Solutions Strategic Partnerships Will Drive 5G Success for Communications Service Providers Using IoT to Create an Intelligent Enterprise Please fill the required details to access the content Digital Simulation Can Improve Automotive Manufacturing Efficiency August | 2021 Manufacturing processes and supply chains are getting increasingly more complex, while manufacturers face constant pressure to reduce their time to market. In an automotive supply chain, for instance, demands for new products can require tens of thousands of components to come together at the same time from different origins, using different modes of transport, and throughout different continents. The assembly line must then be ready with all possible combinations of people, process, tools, equipment, and technology to

assemble and transfer new products to end consumers through a variety of channels. Digital-twin technologies can help overcome these challenges by simulating manufacturing processes, thereby allowing companies to address a variety of scenarios and changes that can boost production cycles, keep them ahead of potential bottlenecks, and improve efficiency and throughput. Modern Manufacturing Challenges Requires Modern Solutions One of the key concerns is reducing the time for new-product production and delivery. But when introducing a new product to the market, manufacturers and planners must address several key questions before changing their capitalintensive physical infrastructure: What is a Digital Twin? All of these issues can be guickly analyzed using a digital twin, as manufacturers are increasingly realizing. A digital twin is a complete digital simulation of the manufacturing process. As of 2020, the market size for digital twin had exceeded \$5 billion, and it's expected to grow at least 35% by 2027. The growing adoption should be no surprise; digital twins can analyze many permutations and combinations, with simulations for all of a plant's technologies and IT systems. These simulations provide the best and mostoptimal recommendations without affecting the current manufacturing environment. Tomorrow's plant efficiency can be enhanced by looking at today's challenges. A digital simulation helps a manufacturer validate changes in the production process before making any costly adjustments that may not be necessary. Digital simulations enable exploration of different what-if scenarios, testing different equipment make and models, varying the location of physical assets within the layout, changing the process flow, and creating alternate MHE routings, for example. These scenarios can all be solved to optimize the manufacturing process, plant capacity, and improve throughput of new or existing facilities. The simulations can also identify problems before they occur and predict the future outcomes in unforeseen scenarios. This enables a manufacturer to improve overall equipment effectiveness, reduce waste, enhance product quality, optimize process flow, increase throughput, and eventually improve plant operations. An Example of Digital Simulation Improving Efficiency Example: Wipro worked with an Indian automotive components manufacturer to overcome challenges on the manufacturing floor. The manufacturer wanted to increase the productivity of the operations, optimize the space floor by adding new machines or equipment, improve process flow, and optimize the MHE. The shop floor activities and existing process were replicated within a digitally simulated environment. The ability to run scenarios before commitment identified several improvements: group products and variants based on processing and routings, identify and reduce gaps between workstations, rearrange the machine cells, and gradually shift to MHEs to control and transport in the shortest distance. The available shop floor space increased 35% by adding new machines, there was a 25% savings in material movement and reduction of MHEs, and overall cost savings were approximately 20%. Today's manufacturers are facing a host of new challenges, and there is a need to introduce more efficient and adaptive technologies to tackle these issues. Digital simulation provides this capability, enabling engineers to generate what-if scenarios and run simulations to validate changes before making expensive capital investments. Moving forward, digital twins will be an essential part of manufacturers' efforts to reduce new-product development times and costs while optimizing production and distribution. Industry: Manohar M G Associate Consultant of Digital Twin, Wipro Limited

Manohar is an Associate Consultant of Digital Twin. He has more than 10 years of experience in discrete event simulation software. He is interested in system simulation, modeling, and optimization, for various aspects in manufacturing. Manohar has worked with leading companies in automotive, FMCG, and retail across the globe. He has a Master's degree in Industrial Automation & Robotics and Bachelor's in Mechanical Engineering. Anirban Bannerjee Product Manager, ER&D, Wipro Limited Anirban has 9 years of expertise delivering a variety of digital transformations. His areas of specialty include Industrial IOT, IT-OT integration, remote monitoring, and predictive maintenance. Anirban is focused on delivering quality solutions to Fortune 500 customers with the goal to optimize cost and modernize the way to work. To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. CSPs are looking to the enterprise (business-to-business) segment to help monetize their investments in 5G. As management guru Peter Drucker once said, ----- Arcticle source ----- https://www.wipro.com/blogs/jack-leach/ ----- Contact Wipro Blogs By Author Five Ways Commercial and Small-Business Banking Benefit from Cloud Please fill the required details to access the content Jack Leach All industries, including financial services, have looked to the cloud to 

#### Five Ways Commercial and Small-Business Banking Benefit from Cloud

---- Arcticle source ---- https://www.wipro.com/blogs/jack-leach/five-wayscommercial-and-small-business-banking-benefit-from-cloud/ ---- About the Author Contact Wipro Related Blogs A New Generation Emerges in India's Evolving Payment System For a successful BFSI cloud transformation, build your complex landing zone right Modernizing the Core Banking System: Enabling the Future Please fill the required details to access the content Five Ways Commercial and Small-Business Banking Benefit from Cloud August | 2021 All industries, including financial services, have looked to the cloud to boost resilience and continuity during the past 18 months. It's not surprising since the cloud can seamlessly integrate parallel systems, create a simplified IT structure, and reduce maintenance costs. For the financial sector, the cloud can also help banks move from heavy capital investments to an operation-based model that drives efficiency. The need for remote services has also driven a spike in demand for digital banking, with banks managing a record rise in digital business transactions and feeling the need for scalability and customization. Today, "going mainstream" with cloud banking has become critical. The Business Benefits for Cloud Adoption in Commercial and Small Business Banking Fortunately, cloud adoption can be far more than a reactive response for Commercial and Small Business banking. It can hold strategic business importance as well. Five key benefits of cloud for the Commercial and Small Business banking sector are: Improved Customer Service: Although cloud delivers operational cost

reductions, a recent survey from Gartner shows that the biggest driver for cloud implementations is now improving the customer experience. This represents a significant change in a short period of time, and it highlights a key business benefit in the new remote-services world. One of Wipro's banking clients, for instance, used the cloud to improve the availability of real-time data for instant and personalized customer offers. This enabled the client to move from making offers based on historical/static data analyzed after monthly cycles to an environment in which it could provide real-time offers through embedded AI tools in customer-facing applications. This level of personalization is critical in servicing consumers' demands, but it's also important for commercial and B2B engagements as well. Banking is witnessing a huge movement to personalization as financial institutions attempt to decrease their time-to-market via the cloud and offer morerelevant products for customers that truly match their needs. Cloud can help overcome legacy customer-engagement tactics that reduce banks' competitiveness, including: Access to enhanced tools and applications: Salesforce blazed the trail for cloud-based CRM tools, with fintechs like nCino integrating with the Salesforce Cloud-based solution to enable the Commercial and Small Business Banking industry to automate and digitalize lending workflows and processes that were historically difficult in the Commercial Lending space. The cloud-based providers have continued to evolve their products through solutions customized to the needs of a particular industry segment. Salesforce Industries provides a suite of 12 industry clouds tailored to specific best practices that help companies deal with their unique challenges. The Financial Services Cloud (FSC) enables banks and financial institutions to automate omnichannel customer journeys and drive straight through processing, which has been a significant area of struggle for many banks. Many banks have attempted to solve customer onboarding through automation only, resulting in an acceleration of inefficient processes to the next bottleneck. Addressing the challenge requires a comprehensive cloud-based strategy and roadmap that also incorporates the use of fintech solutions and rules engines to ensure compliance, particularly for institutions with global footprints. Example of business differentiators that can be leveraged by banks include: Enhanced capacity to add new and improved offerings based on customer insights: Gone are the days when it takes years to implement new products or changes to existing offerings. Cloud-native environments offer open APIs by third-party providers, giving banks and financial institutions access to new capabilities without the traditional constraints of legacy systems built 40 years ago. This allows banks to accelerate innovation using common development platforms and centralized applications. Citi has led the market by offering cash and treasury management services for commercial and corporate customers with Oracle ERP. This has enabled the bank to make product and service recommendations and enhancements based on the customer's real-time data. Amazon, meanwhile, has built a \$2+ billion trade finance business based on the buying patterns and seasonality trends of the merchants using its platform. This enables point-of-need credit offers for customers that are convenient and easy to utilize based on transaction-level data, and it allows diversification into new sectors and platforms like digital marketplaces based on deeper customer insights. Efficient platforms and ecosystems to support daily tasks: As financial institutions embrace the cloud, risk, security and regulatory compliance become key considerations

in their journey. The use of Governance Risk and Compliance (GRC) platforms like OpenPages, Archer and ServiceNow can greatly benefit from the cloud, and risk modeling and scenario planning are nature activities and functions to leverage the cloud. Fintech offerings like Hexanika have grown due to cloud enablement, while the cloud has also enabled the growth of GRC platforms that enable banks to eliminate "shadow IT" environments in which End User Applications (EUC) have been developed and enabled outside the IT compliance and control function. By moving EUC applications into an IT-compliant ecosystem, banks and financial institutions can simplify the maintenance and support of EUC applications, greatly reducing their operational risks. Moving these applications involves more than just a "lift and shift" approach and can be time consuming and costly for banks and financial institutions. It doesn't have to be. Wipro's EUC Remediation solution helped one of the world's largest financial-services companies reduce the time and costs associated with remediation by following an eightstep framework that follows a logical flow from rule setting, cataloguing, assessing, remediation, and migration to steady state. Alternative Strategies for Core Modernization: For many years, banks and financial institutions have actively evaluated how to evolve from core banking platforms built 40 years ago that are rigid, difficult to expand and maintain, and challenging to expose to the digital banking ecosystem. These obstacles are compounded by the number of legacy-platform experts who have either retired or are planning to retire soon. As the business of banking increasingly evolves into real-time, hyper-customized, data-driven BaaS solutions that are available anytime/anywhere and are AI/ML driven, a new core banking generation is needed. The scale of these modernization projects quickly results in significant costs, timelines, and risks to the bank's fundamental businesses. But cloud-based applications offer the potential for core applications and systems to remain in place while the supporting applications are maintained on the cloud using API tools and integrations. This can significantly reduce the costs and risks of modernizing core applications. Realign Overall IT Infrastructure with the Help of Cloud Banks have started their cloudadoption journey and have had limited success in specific functions. Yet cloud today has a whole new appeal for Commercial and Small Business banking, with demand increasing for remote services and security advances making cloud even more compelling. Banks need to adopt a more mature cloud strategy that aligns with their business goals. Wipro has helped financial and non-financial clients on their cloud journeys through consulting, advisory and IT Services. Contact us today to learn how Wipro can support your organization's cloud objectives. Industry: India's payment journey has changed significantly over time. What started as a barter system has evolved into cashless payments Migrating your data and services to a public cloud service like Google Cloud offers multiple advantages, including increased flexibility and agility.... Traditional banks are reinventing themselves to meet rapidly evolving customer expectations, 

www.wipro.com/blogs/mansi-dubey/ ---- Contact Wipro Blogs By Author Accelerate Time to Market The Power of CI/CD for Telecommunication Service Providers Please fill the required details to access the content Mansi Dubey Mansi Dubey Consultant, Domain & Consulting, Comms & Tech, Wipro Limited Mansi is a DevOps consultant working for the T-Mobile Netherlands Transformation program as part of the Comm & Tech group,

#### Accelerate Time to Market: The Power of CI/CD for Telecommunication Service Providers

----- Arcticle source ----- https://www.wipro.com/blogs/mansi-dubey/ accelerate-time-to-market-the-power-of-ci-cd-for-telecommunication-serviceproviders/ ---- About the Author Contact Wipro Related Blogs 5G: Taking the Aviation Industry to New Heights New Frontiers Design Thinking and Organizational Change Management: A Partnership Please fill the required details to access the content Accelerate Time to Market The Power of CI/CD for Telecommunication Service Providers August | 2021 New technologies like 5G, plus constantly changing consumer demands, are forcing telecommunication service providers (TSPs) to create and rollout features faster and faster. For relatively recent applications developed with contemporary digital technologies, new features and functionalities can proceed relatively easily. But for legacy applications - typically commercial off-the-shelf (COTS) systems - rolling out new features can be a slow and tedious process which eventually results in slower rollout of new features to end customer. Traditionally, TSPs have preferred COTS solutions for core business functions like billing, mediation, customer relationship management (CRM), order management, and others. COTS solutions, after all, are readily available, fulfill standard requirements, and, after their initial implementation, can be customized to serve an enterprise's unique business requirements, thus reducing dependency on the solution vendor. However, new feature releases will involve configuration changes. For example, a change in pricing plans or charge aggregation logics will necessitate a change in billing system; localized customizations could change the billing adaptor layer. This leads to problems in an environment where business demands are evolving rapidly, with many TSPs finding it difficult to keep their systems up to date. Moreover, creating multiple development environments to cater to multiple change cycles leads to additional maintenance headaches. To work with customizations and configuration changes and still deliver production updates faster for a legacy COTS setup, Wipro recommends a comprehensive improvement strategy that is integrated with and centered around a fully automated continuous integration/continuous deployment (CI/CD) pipeline. Understand the Landscape Here's a good first step toward understanding the scale and size of the problem of rolling out changes to COTS solutions: Analyze the enterprise's landscape and existing methodology. Wipro's experience in building solutions for the telecommunications domain has illuminated some of the potential challenges and their impacts, detailed in the chart below.

These problems negatively impact productivity and hinder the business goal of faster features rollout. Adopt a CI/CD Approach Once the landscape and potential bottlenecks are understood, TSPs with a legacy COTS environment should consider adopting a fully automated CI/CD approach to manage customizations and configuration changes and still achieve faster production delivery. In broad terms, this CI/CD approach solution involves three stages: Stage 1: Process optimization Start by evaluating processes such as release management, environment data refresh, and test management to identify and remove redundancies. Next, optimize time-consuming steps in these processes such as wait time for manual interventions or a complex process which can be simplified into a smaller number of steps Stage 2: Tools selection and enhancement A reliable, user-friendly tool that supports integration to pipeline is essential to a CI/CD approach. Examples include: Stage 3: Build a fully automated CI/CD pipeline for all environments The CI/ CD pipeline integrates all the tools and processes to enable a single-click, end-to-end delivery of changes to production. Go to Market Faster An integrated CI/CD pipeline, along with process improvements, represents a holistic solution that can enable faster and smoother rollouts of changes to production. Providing an additional layer of quality and security checks is a step to saving a lot of reactive effort when encountering future issues. The steps outlined above address concerns posed by most of the visible layers of a COTS set-up. The exception is the core code of COTS products, which remains with the product vendor and is expected to evolve according to CI/ CD demands. But the rest of the layers, which are under the purview of TSP, can be managed as follows: Fig 1: Layers to legacy COTS application with potential accelerators for enabling faster rollout Next Steps Enterprises looking to accelerate deployment of COTS revisions or enhancements should consider the CI/CD methodology. But before embarking on such an endeavor, consider these prerequisites for success: The CI/CD approach can be a powerful way to roll out better software and do it faster. For example, Wipro recently worked with T-Mobile Netherlands to bring about one such transformation for the company's BSCS Billing application, which has generated significant improvements. Implementing a CI/CD pipeline for a legacy application such as BSCS (20+ years old) was only possible with the skills and know-how of Wipro, being a big IT company T-Mobile Billing DevOps team Industry: 5G is an ecosystem play where multiple technologies Gender equality leaders share insights on inclusion. When multiple perspectives shape how an organization handles change, greater opportunities for success are in reach. Get the details at our blog. www.wipro.com/blogs/robin-tiwari/ ---- Contact Wipro Blogs By Author How to Integrate Application Security in Cloud Migration Strategy Please fill the required details to access the content Robin Tiwari Robin Tiwari Principal Technical Consultant, Cybersecurity & Risk Services, Wipro Robin has over 16 years of experience with specialization in the Application security domain. He has worked and managed projects related to Security Architecture, Secure SDLC, Cloud Security, Vulnerability Management, Penetration Testing and Security Solution Designing. Robin is a Certified Ethical Hacker (CEH) from E-Commerce Consultants International Council. He holds the degree of MS in Cyber Law and Security from the Institute of Management Technology (IMT) Ghaziabad. He also has accreditations with Top 10-security researcher in Q3 2014, Q3 2015, Q4 2015 of the PAYPAL US.

#### How to Integrate Application Security in Cloud Migration Strategy

----- Arcticle source ----- https://www.wipro.com/blogs/robin-tiwari/how-tointegrate-application-security-in-cloud-migration-strategy/ ---- About the Author Contact Wipro Related Blogs Risk in the ESG Age Exchange of Cyber Threat Intelligence Among Peers Using Decentralized Identity Networks and IoFT Cybersecurity through collaboration Please fill the required details to access the content How to Integrate Application Security in Cloud Migration Strategy August | 2021 Companies take different approaches to cloud adoption. While some go all in with a full adoption of cloud infrastructure for applications and services, others move parts of enterprise operations into the cloud. The assumption that applications and data are safe because they are being managed or monitored by cloud providers is wrong. The responsibility of a cloud service provider is only to secure the infrastructure it uses to host its cloud and services. Companies using the cloud infrastructure are still responsible for ensuring security of their applications and data. As cloud providers offer many types of services, it is a good idea to integrate application security into the cloud migration program. The state of application security in cloud migration Worldwide information technology (IT) predictions by the International Data Corporation (IDC) suggest that more than 500 million digital applications and services will be developed and deployed using cloud native approaches by 2023. Many companies have already migrated their applications from the on premise infrastructure to the cloud or are in the process of transferring their applications to the cloud so that they can take advantage of the benefits of cloud computing, including infrastructure as code (IaC), dynamic scaling, and faster time to market. While companies transition to the cloud, they must consider all aspects of the security posture of their cloud application deployments. It is necessary to perform upfront due diligence when considering data security, secrets, and key management, logging, identity and access management (IDAM), network access and monitoring, and other aspects of cloud architecture, which may vary by cloud provider. However, what about applications' security? What are the various levels of application security that are performed during re-hosting, refactoring, re-architecting, rebuilding, and replacing? How did the company determine the eligibility of application security during the migration program over the infrastructure as a service (IAAS), platform as a service (PAAS), and software as a service (SAAS) platforms? The dependence on the third party application programming interfaces (APIs) is a major vulnerability; API security controls must match the risk profile of each app. Building application security controls based on risk Adoption of a precise application security testing strategy can address the effectiveness of security controls over the modern cloud infrastructure. Many cloud providers offer inbuilt tools to secure

defaults on the cloud landscape. However, they lack necessary practical effectiveness due to a lack of strategy to operationalize. It is also necessary for application security measures to be aligned with industry regulations, such as the Health Insurance Portability and Accountability Act (HIPAA), Sarbanes-Oxley Act (SOX), Payment Card Industry Data Security Standard (PCI DSS), the National Institute of Standards and Technology (NIST), General Data Protection Regulation (GDPR), and others. Here are a few best practices for app security strategy: Figure 1: Strategies for securing application migration to the cloud Securely building and operating applications Many cloud providers present the option of building, testing, and deploying with continuous integration/continuous deployment (CI/CD) to accelerate software development lifecycle. At the other extreme of the application modernization spectrum, there is a preference for not migrating an existing application, but instead for it to be developed as a "greenfield" or "cloud native" application. Among the constant challenges facing companies in CI\CD environments is rapid application security testing to ensure speedy production deployment. It may be beneficial for the company to deploy products quickly, but all application security activities have not been performed as a result. The idea is to collaboratively address security throughout the DevOps process as a set of policies, recommendations, and safeguards. Implementation of development, security, and operations (DevSecOps) then becomes a central part of the entire application lifecycle, and every team and person working on an application is required to consider security. It is very important for an application security strategy to include automation through CI/CD integration and use it to gain an edge over new and evolving threats. Due to the shift to cloud and cloud-native application technologies, applications are getting more complex. Massively distributed microservices and serverless functions enable developers to focus solely on their own services, and no one has a complete grasp of the entire codebase. The shift left approach adopted by the company allows developers to analyze code in a GitHub repository to find security vulnerabilities and coding errors in the applications source code or in third party integrated applications. Among the most common security assessments run by DevSecOps operations are static application security testing (SAST), software composition analysis (SCA), interactive application security testing (IAST), dynamic application security testing (DAST), and runtime application self protection (RASP), followed by manual penetration testing. Many cloud providers include various security tools in their subscriptions, but these tools are not efficient enough to protect against all of the latest cyberattacks. For a secure environment, it is important to follow all the best practices (two factor authentication, strong password, etc.), and to implement a strategy for effective application security. The cost of modernizing applications over cloud may be costlier if inadequate security practices are followed by companies, but the risk inflates if we do not conduct security assessments at the various phases of cloud migration. Table 1 shows a highly recommended approach to cloud migration. Table 1: Assessments need in cloud migration Secure way forward Companies that are moving forward rapidly into cloud applications and infrastructures are required to consider all aspects of security, most notably the role of application security in this program. The mix of technologies and environments used by cloud providers is making them increasingly susceptible to security threats. An effective application security strategy and

approach prevents various cyberattacks, meeting the objective of securing the environment of the company. It also makes the cloud migration program economical by conducting security assessment for the cloud migration strategy. Wipro's Application Security Framework will help your business stay protected and resilient. For more information, contact us at cybersecurity.services@wipro.com . Industry : Robin Tiwari Principal Technical Consultant, Cybersecurity & Risk Services, Wipro Robin has over 16 years of experience with specialization in the Application security domain. He has worked and managed projects related to Security Architecture, Secure SDLC, Cloud Security, Vulnerability Management, Penetration Testing and Security Solution Designing. Robin is a Certified Ethical Hacker (CEH) from E-Commerce Consultants International Council. He holds the degree of MS in Cyber Law and Security from the Institute of Management Technology (IMT) Ghaziabad. He also has accreditations with Top 10-security researcher in Q3 2014, Q3 2015, Q4 2015 of the PAYPAL US. Arun Pillai DevSecOps Architect, Cybersecurity & Risk Services, Wipro Arun champions DevSecOps charter for Security Assurance Service within Wipro's Cybersecurity and Risk Services division. He has over 14 years of experience with specialization in the security domain. He has worked and managed projects related to Security Architecture, Secure SDLC, Threat Modelling, Secure Coding, Penetration Testing and Security Consulting. Arun is an ISC2 Certified Information Systems Security Professional (CISSP) and ISACA's Certified in Risk and Information Systems Control (CRISC). He holds a Master's degree in Information Technology from Sikkim Manipal University of Science & Technology and is a TOGAF certified Enterprise Architect from TheOpenGroup. A tidal wave of ESG regulations is looming across markets. To prepare, companies are shifting responsibility for sustainability management and reporting to the risk management domain. Risk executives are investing in enhancing their governance, risk management, and compliance (GRC) systems to account for ESG factors. The ability to exchange cyber threat intelligence (CTI) in privacy preserving and in a secure manner is vital for enterprises to manage their security risks effectively. During the pandemic, dependence on digital technologies has seen unprecedented growth. From managing remote workforces to catering for changing customer expectations, the paradigm shift towards digital has Arcticle source ---- https://www.wipro.com/blogs/joshua-ault/ ---- Contact Wipro Blogs By Author The Key to Worker Success: M&A CRM Excellence Framework End-to-End Corporate Property Management with Lead-to-Leasing Integration Seven Ways to Transform the Wealth Management Experience Please fill the required details to access the content Joshua Ault Joshua Ault Portfolio Partner - Capital Markets Josh is responsible for Capital Markets at Wipro's Salesforce Practice and has over 15+ years of experience in designing, developing, and implementing client-centric solutions for enterprise customers. He is a senior leader skilled in building effective teams capable of executing scalable and predictable front and middle office processes that result in revenue expansion and service excellence. His capability to straddle both Strategy and core execution uniquely positions him to ensure his clients' success in the CRM space. Mergers and acquisitions (M&As) are a difficult challenge for any company to undertake. The value chain of a corporate real estate property portfolio is

### Seven Ways to Transform the Wealth Management Experience

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#### End-to-End Corporate Property Management with Lead-to-Leasing Integration

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the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content End-to-End Corporate Property Management with Lead-to-Leasing Integration September | 2021 The value chain of a corporate real estate property portfolio is simple. It is essential to manage assets and liabilities in an effective manner. This includes maximizing the ROI on those investments and finding new opportunities for growth. With this in mind, it is important to look for a solution that can manage all aspects of property management, from lead to leasing to portfolio optimization. Salesforce has a multi-cloud approach that seamlessly integrates with CRM capabilities to provide a complete end-to-end solution for corporate real estate property portfolio management. A Fully Integrated Solution An integrated property management solution provides benefits in many areas. These benefits include more than just process efficiency gains. By integrating all data, real estate companies can have visibility into the entire property management lifecycle and leverage analytics to proactively manage tenants and properties. These insights help companies increase the ROI of their portfolios by preventing inefficiencies or mistakes. The popular Salesforce CRM is a dynamic solution that can seamlessly address all aspects of property management and manage leads, opportunities, contracts, billing, servicing, and portfolio optimization. And, it manages all of those aspects while providing visibility to the entire team for efficient workflows. Lead Management With an integrated lead-management solution, firms can easily track and communicate with prospects and define multiple audiences to set each audience on a personalized and automated journey from lead to lease. The time and effort saved on these marketing activities has a direct impact to the bottom line, freeing the firm's limited workers to focus on other value-add initiatives. Opportunity Management Easily converting leads and creating opportunities allows for a seamless handoff and speedy closing. Companies can leverage term sheet digitization and automation for generating both long-form and short-form term sheets. Automation can also accelerate processes, reducing the time it takes to generate documents by up to 50% and providing a single source of truth that removes any question as to what has been agreed upon. The automated solution converts a letter of interest to a letter of intent (LOI). LOI digitization and optimization automates the process of getting a corporate real estate manager's signature to an agreement and moves it to be reviewed by legal counsel for final sign-off before sending to vendors. This eliminates manual steps and removes any chance that the client may not have completely reviewed the document. Contractual Management A key to keeping tenants happy is managing to the agreed-upon performance obligations. Automated contract-management capabilities can manage contracts and obligations in one place. With this functionality, corporate real estate firms can easily track all contractual relationships, provide transparent reports on compliance with contractual terms, quickly identify at-risk tenants based on agreed upon performance metrics, send automated renewal reminders and contract renewal notices, and automate the process of generating new contracts. A robust leasing-management portal should enable firms to keep track of all details involved in an application process by using intelligent guided workflows. This includes features like scheduling

appointments with prospects, showing the property, and collecting signatures. Billing Management Billing can be a painstaking and error-prone process. Salesforce provides billing capabilities that generate invoices and statements that can be billed directly through the CRM, saving time for the client by eliminating manual steps for tracking all billing activity and receivables. Service Management A critical area for customer satisfaction is how a firm manages service. Salesforce Service Cloud provides both proactive service management and reactive issue resolution. This enables a firm to proactively manage tenant needs, identify at-risk tenants based on agreed upon metrics, and fix the problem before it becomes an emergency situation. With workflow automation, firms can also automate the process of assigning service requests to the appropriate agent, generate a follow-up email with status updates for all parties involved, and track the number of hours an employee has spent on each task. Another area that improves customer satisfaction is providing self-service portals. Using Salesforce Experience Cloud, tenants gain access to their leasing information, can generate offers, and see the status of lease renewals. Portfolio Optimization Insights and analytics help clients make informed decisions about how to manage their corporate real estate portfolio. This includes things like return-on-investment (ROI) calculations for sales and leasing, tenant turnover forecast analysis, and a dashboard that shows the performance of each property in terms of revenue, occupancy cost per square foot, market rent per square foot, ROI and more. The lease optimization feature in Salesforce's Portfolio Management tool provides a dashboard that shows the revenue breakdown of each lease and the tenant's performance against their obligations. This enables firms to see potential opportunities, while tenant turnover reporting capabilities enable firms to see all relevant turnover and vacancy details. This information is critical, because it helps proactively identify improvement opportunities. Finally, AI and ML identify cross-selling and up-selling capabilities. Firms can see patterns in lease renewal rates, get a clear picture of the customer's needs, and can recommend relevant products or services. AI provides insights into areas like occupancy rates and market rental values so firms can see trends over time. This information helps real estate firms plan future steps whether developing new properties, expanding into a different city or country, or even acquiring another company in the same industry. Improved Property Portfolio Management Now is a great time for corporate real estate firms to improve their property portfolio management. Leveraging the Salesforce CRM and related tools, firms can improve their visibility into the overall portfolio while streamlining portfolio and turnover management. At the same time, they can reduce their application landscape complexity while increasing their flexibility and scalability. The Wipro Salesforce Practice is familiar with the challenges that corporate real estate managers face and has helped many clients maximize results by enhancing their Salesforce capabilities. Industry: Joshua Ault Portfolio Partner - Capital Markets Josh is responsible for Capital Markets at Appirio and has over 15+ years of experience in designing, developing, and implementing scalable, reliable, and secure architecture for enterprise customers. He is a senior leader skilled in building effective teams capable of executing scalable and predictable front and middle office processes that result in revenue expansion and service excellence. His capability to straddle both Strategy and core execution uniquely positions him to ensure his clients' success in the CRM space. Enterprise Mobility Management

### The Key to Worker Success: M&A CRM Excellence Framework

----- Arcticle source ----- https://www.wipro.com/blogs/joshua-ault/the-key-toworker-success-ma-crm-excellence-framework/ ---- About the Author Contact Wipro Related Blogs Re-Imagining Dispute Management with an Integrated Digital Strategy Why 2020 Will See the Birth of the 'Trust Economy' The New Private Equity: Creating Value Quickly and Reliably Through Digital Transformation Please fill the required details to access the content The Key to Worker Success: M&A CRM Excellence Framework October | 2021 Mergers and acquisitions (M&As) are a difficult challenge for any company to undertake. While the core of every company is its customers, CRM is often overlooked as just another component to the integration puzzle. In fact, it is the most critical puzzle piece. With any M&A activity, existing and new clients will experience significant change. Businesses that fail to manage this change will head in the wrong direction. By focusing on customers and CRM, enterprises can maximize the benefits from their M&A journey. An M&A CRM Excellence Framework for Capital Markets While all industries have M&A needs, the capital market space has many unique elements and processes, particularly where customers are concerned. Wipro's M&A CRM Excellence Framework for Capital Markets is specific to CRM and can be a critical component in companies' overall integration management office. Using Salesforce CRM and a variety of Wipro tools, assets and methodologies, this framework has helped enterprises get the most out of their M&A activities and accelerate their outcomes by identifying both qualitative and quantitative benefits of the integration at each step in the journey. There are many benefits to any integration or acquisition. It's important not only to know what those benefits are, but also to be able to identify them in an objective way. The M&A CRM Excellence Framework for Capital Markets guides companies to define success specific to their objectives and goals, with successful integration based on four key building blocks: Client Success, Worker Success, Operational Success, and Financial Success. Goal #1: Client Success Goal #2: Worker Success Don't overlook worker success as a key goal. As important as customers are, employees must also be prepared for M&A-related change. There are many ways to accomplish this, from incentivizing the right behaviors and training workers on what to expect in an integration, to upskilling the team and adjusting compensation appropriately so their experience is rewarding. In the 2020 M&A Report by PWC, only 10% of firms stated success in employee retention from an M&A

integration. The M&A CRM Excellence Framework for Capital Markets helps define worker success by addressing issues including: To keep the workforce happy, design what success looks like for them well in advance of any M&A activity - otherwise they may not stick around. This is key to worker success. Goal #3: Operational Success Operational success should be addressed during the integration process. M&As are often disruptive to a company's operations, but companies can have a successful integration by addressing both the worker and operational sides of the equation. To ensure operational success, have a detailed process plan that addresses questions like: In addition, it is important to think about how integration activities may impact broader business goals and strategy. Understanding this framework can help identify where there might be opportunities for improvement or change before any M&A activity takes place. Goal #4: Financial Success What does financial success look like for a company undertaking an M&A transaction? The answer is not always "more profit." Companies define different measures of financial performance. For example, some firms use return on equity as their measure of financial success. Think about why a company is undertaking an M&A transaction, what it wants to achieve, and the overall cost associated with that decision - not just in terms of dollars, but also time and effort. By working through the M&A CRM Excellence Framework, companies can define their measures for financial performance and design how they are tracked through metrics or KPIs over time. The last thing a company wants is any surprises when it comes to this important aspect! The goal of any M&A activity is to position the affected entities favorably for future success. Wipro's M&A CRM Excellence Framework for Capital Markets is designed to provide a measurable framework that helps companies find client, worker, operational, and financial success before, during, and after an M&A transaction. To learn more about CRM's role in M&A activities, please contact us at wsp-cloud@wipro.com. Industry: Joshua Ault Portfolio Partner - Capital Markets Josh has more than 15 years of experience designing, developing, and implementing scalable, reliable, and secure architecture for enterprise customers. He is a senior leader skilled in building effective teams capable of executing scalable and predictable front- and middle-office processes that result in revenue. Online purchases are on the rise, and with them, so are fraud and disputed payments. When we look back at the COVID-19 pandemic of 2020, we will see not just the human and economic loss inflicted by the virus, but an important gain - a growing global awareness of the value of trust. www.wipro.com/blogs/anees-khan/ ---- Contact Wipro Blogs By Author Content Moderation: Keeping the internet safe using technology and human expertise Please fill the required details to access the content Anees Khan Anees Khan Vice President and Global Head of Consumer Business for Wipro-iCORE An industry veteran, Anees has more than 22 years of IT/ITES experience spanning sales, solutions, and services for global markets, and leading strategic planning and operations for various businesses. In his 19 years with Wipro, Anees has held various leadership roles across industry verticals. He is an accomplished sales and delivery professional, known for leveraging quality management methodologies to streamline processes, drive productivity, and increase competitive positions. He is also a strategic problem-solver with an aptitude for enhancing value propositions and increasing team performance through effective training and management.

## Content Moderation: Keeping the internet safe using technology and human expertise

----- Arcticle source ----- https://www.wipro.com/blogs/anees-khan/contentmoderation-keeping-the-internet-safe-using-technology-and-humanexpertise/ ---- About the Author Contact Wipro Related Blogs 4 Ways Super Funds Can Elevate Member Experience The CHRO Imperative for the Hybrid Workplace How organizations should identify and cope with the challenges to cultural transformation? Please fill the required details to access the content Content Moderation: Keeping the internet safe using technology and human expertise August | 2021 Content is King. Never has this been truer than now, an age when User Generated Content (UGC) is a critical determinant of businesses success and an engine for public advocacy. UGC in the form of reviews become prompts for travel bookings, posts on Facebook shape political thinking, crowdsourced information for maps makes it easier to find your way around new cities, and videos on YouTube can educate. But with the democratization of content, societies are becoming concerned about the misinformation, hate, fraud and violence that UGC has unleashed. The COVID-19 pandemic has accentuated this. Study after study has reported that the social media "infodemic" has played a key role in increasing psychological anxiety, and One medical journal observed that "health-threatening misinformation is spreading at a faster rate than the disease itself". UGC is getting a bad name. It needs expert moderation. The task is gigantic. Twitter hit the one billion tweet mark in May 2009: today it takes less than two days for a billion tweets. In 2020, over 34.6 million videos were removed from YouTube for violating community guidelines, and These numbers provide a guick insight into the size of the problem. Good or bad, UGC is here to stay. Over 86 percent of businesses are using it as part of their marketing strategy. The challenge then is to identify the bad and eliminate it. To do this, organizations need Digital Guardians to ensure UGC remains safe, meets regulatory guidelines and provides citizens the means to take informed decisions. UGC volumes are too large for humans to moderate. Technology that depends on automation, Artificial Intelligence and Machine Learning is necessary to filter content at scale using varied local laws, organizational polices, and community values. But UGC is a dynamic environment. Time to time, technology is bound to fail and will need humans to make the right judgment calls. About 3 percent of all exceptions thrown up by content moderation technology needs trained human intervention to validate the content for use. Our experience of handling trust and safety for customers in 25+ languages shows that UGC needs a 3Ps approach: Predict Probe Prevent Even as Digital Guardians work using technology to cleanse UGC, challenges remain: There is a lack of moderation standards; content now goes viral in minutes, thanks to mobile phones and reacting in real time is an uphill task; and there are grey areas

where religious goals and political agendas cross. The nature of the problem is immense. This is why content moderation needs to move from preventing to predicting. More important, it demands an inordinate focus and cognitive flexibility to take the right decisions in a fast-paced environment. Today, UGC has a rapid impact on businesses and the mental health of entire populations. Moderation is a top priority. Wipro is proud to be a responsible Digital Guardian, partnering the top global digital platforms to make the online world a safer place. Read our report, 'Content Moderation: The art and science of making the internet safe and useful again' to know more about content moderation services, and how we put employee wellness at the center of these services. Industry: Anees Khan Vice President and Global Head of Consumer Business for Wipro-iCORE An industry veteran, Anees has more than 22 years of IT/ITES experience spanning sales, solutions, and services for global markets, and leading strategic planning and operations for various businesses. In his 19 years with Wipro, Anees has held various leadership roles across industry verticals. He is an accomplished sales and delivery professional, known for leveraging quality management methodologies to streamline processes, drive productivity, and increase competitive positions. He is also a strategic problem-solver with an aptitude for enhancing value propositions and increasing team performance through effective training and management. He is based in the UK. Despite the long-standing history of private pension plans, superannuation was introduced to Australians over 20 years ago to help them support their retirement in a financially viable way. Fast forward to 2020; it is now a A\$3T business. Over the last two decades, superannuation has become complex, highly regulated, and vulnerable to scandals. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just neglected www.wipro.com/blogs/erik-e-bosman/ ---- Contact Wipro Blogs By Author Change Management, the Cloud, and SaaS The future of work is anywhere, anytime! Please fill the required details to access the content Erik G. Bosman Erik G. Bosman Change & Transformation Lead, Wipro Erik Bosman is the Change & Transformation Lead for the Google Workspace Practice. He works with enterprise customers to transform their workplace by bringing the Google way of working through change management and technology to increase productivity. Erik is also an experienced trainer and, in that capacity, has trained 1000s of employees at customers to fully utilize Google Workspace. Going to The Cloud is no longer anything 'new' or 'innovative'..... What is the most visible change that the world is seeing in 

### Change Management, the Cloud, and SaaS

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Related Blogs Optimizing Field services Through AR Transforming the leaveof-absence experience into an employee-retention tool A Smarter Way to Collaborate and Build Applications with Azure DevOps Please fill the required details to access the content Change Management, the Cloud, and SaaS August | 2021 Going to The Cloud is no longer anything 'new' or 'innovative'. As stated by a trainer somewhere in a GCP training, "Cloud Computing is utilizing a platform that brings possibilities at a scale never available before." With all that power at low cost, the last decade has shown another trend; Software as a Service (SaaS). Google Workspace, Slack, SalesForce, and if you bend the definition a little, Office 365 are all delivered as a service that's "just there". Almost like electricity. It's there; it just works. The IT parlance often uses the analogy of a car. In the early days, the driver had to know a lot about the inner workings. So much so that actually, the person was more of a mechanic than a driver. However, modern technology has shifted this paradigm. Today, you can even have the flexibility of being in the "in-between stage" of worry-free ownership. Now you can lease a car with all the maintenance problems wrapped up nicely in a monthly fee, freeing you from the responsibility of even having to take a look at the engine. To take this analogy up a notch, you might not even want the car's exclusive rights- if all you want is transport when you need it, why have a car standing in front of your house when you're not driving it? Cloud and SaaS are changing the IT landscape for a while now" Similarly, The Cloud and SaaS are changing the IT landscape for a while now. In the early days, you needed engineering skills to run an IT department. You had to know about file servers, mail servers, security, infrastructure, the whole shebang. With SaaS, that 'engineering' need is gone. You buy a license, log in, and off you go. Of course, there is still a need for skilled engineers, but now they will likely be busier creating solutions than maintaining them. And for a good reason - The Cloud brings many more possibilities at a lower cost and with better scalability, availability, and security. The only reason not to migrate to cloud is if you're not allowed to or simply don't want to. Need another vehicle analogy? If you're not allowed and need to do the maintenance yourself: a military tank. If you just don't want to: a race car. Security is of particular importance in the cloud, as it's a shared responsibility. Like a leased car, the engineering is taken care of, the locks are fitted to the doors, but it's our responsibility to use them. We still need to take precautions with our data and its access., Cloud technologies give us the flexibility of on-demand storage, but we are still required to lock the door to keep the contents safe. "Just buy it as part of a service and be done with it" With the power of the Cloud, an enterprise can buy services like endpoint management, disaster recovery, malware protection as part of a service, with no additional liabilities. OPEX, not CAPEX. Google Workspace, which runs directly from Google's data centers in a browser, is an excellent example. We can use various security tools like data loss prevention (DLP), built-in antivirus and single sign-on (SSO) with robust security wrappers to ensure that only those authorized and authenticated can access our precious data. Back to cars: Although leased vehicles are great, remember to lock your doors! There is a new challenge that comes with all those fantastic new capabilities - change management. Before going into that, let's look it up on Wikipedia: "Change management (sometimes abbreviated as CM) is a collective term for all approaches to prepare, support, and help individuals, teams, and organizations in making organizational change. Drivers of

change may include the ongoing evolution of technology, internal reviews of processes, crisis response, customer demand changes, competitive pressure, acquisitions and mergers, and organizational restructuring." [1] "Change Management is nicely aligned with the benefits of Cloud Computing" Drivers of change. Another car analogy? Just kidding. The reasons for implementing change management are nicely aligned with the benefits of cloud computing - faster, scalable, flexible, available, cheaper, everything you need to stay ahead of the competition and for the survival of an organization. From a technical perspective, that's an easy decision to make, but what about the employees? Earlier, our colleagues used to be bogged down because solutions dictated how work was to be done and organized. Now that functionalities are like services an organization subscribes to, it's worth looking into the capabilities and needs of end-users too. Let's retake the car analogy. If you have a 4-cylinder sedan that can do 100km/h, you'll probably get by with a driver's license and a bit of experience. But what about a full-size truck that can easily do 500 km/h and is also a boat? And a plane? It would be a bit weird not to change anything else. I'm sure you get my point. Change Management is critical to maximize the outcomes of any investment. It's where capability meets technology. Capability and technology can easily hinder each other, but great things can happen once an organization gets them aligned. Implementing something new as a service, just because you can, is probably not going to change things much for the better. With Google Workspace, we see this often. Workspace implementations without proper CM result in people wanting to imitate Microsoft's Office in Workspace with sub-par results. However, products start to shine when organizations learn to adapt and utilize the capabilities, resulting in a happier, more collaborative and effective workforce. At the same time, organizations see top-line improvements as data is used more effectively to support business outcomes and adopt Google's Growth Mindset-focused ways of working. Mind you; CM is not just 'a training' or 'a poster' somewhere. It's an ongoing process. It should be part of business strategy, and it should be an effort that evolves with the organization to align technology and capability continuously. Change Management should be ingrained. At Wipro in the Google Workspace Practice, we consider change management as the bedrock of successful implementation. The CM workshop that kicks off implementation is a significant driver for technical architecture and planning. What is the vision behind all this? How will we meet strategic requirements? What holds us back? What is our readiness, and how do we get everyone on board? How do we excite employees for the upcoming changes? How do we enable the organization as a whole for what's to come? How do we embed solutions, and last but not least - how do we continuously grow for the better? It's guite the challenge. But it's a critical factor of success. Therefore, Wipro has the capabilities to help you maximize your investment for the outcome. That transformation is exactly why organizations need to look into the possibilities of the cloud from the perspective of change management. Change management is all about successfully getting from where we are now to where we want to be. Ha! Another car analogy. Let's jump in and get on the road trip together. References: "Change management - Wikipedia." https://en.wikipedia.org/ wiki/Change management. Accessed 18 Aug. 2021. Industry: Erik G. Bosman Change & Transformation Lead, Wipro Erik Bosman is the Change & Transformation Lead for the Google Workspace Practice. He works with

enterprise customers to transform their workplace by bringing the Google way of working through change management and technology to increase productivity. Erik is also an experienced trainer and, in that capacity, has trained 1000s of employees at customers to fully utilize Google Workspace. In the evolving landscape of digital workplaces, efficient field service operations are critical in ensuring reduced downtime... appy employees usually stay at their jobs, frustrated workers often don't. Chief human resource officers (CHROs) tell us that the corporate leave of absence (LOA) process is one of the most common sources of employee frustration. Employees often rank their LOA experiences low on the satisfaction scale, using descriptors such as complicated, confusing, inconsistent, time consuming, and unresolved. In a world where business is evolving at the speed of thought, rapidly changing market conditions pose several challenges for enterprises across industries.

### The future of work is anywhere, anytime!

----- Arcticle source ----- https://www.wipro.com/blogs/erik-e-bosman/thefuture-of-work-is-anywhere-anytime/ ---- About the Author Contact Wipro Related Blogs Optimizing Field services Through AR Transforming the leaveof-absence experience into an employee-retention tool A Smarter Way to Collaborate and Build Applications with Azure DevOps Please fill the required details to access the content The future of work is anywhere, anytime! October | 2021 What is the most visible change that the world is seeing in terms of emerging work trends? Work from home, work from anywhere, on any device, wherever you are. The coronavirus pandemic was a powerful force to bring this shift, and clearly, this new way of working isn't going away. Collaborative productivity systems like Google Workspace also embrace this trend and bring new options to support the hybrid work and work-from-anywhere models. For example, attendees can now join any meeting virtually. Strangely, while the focus is on how people work, the benefits for organizations are often overlooked. The media shows this trend through rose-colored glasses- we've all seen the guy with a laptop in a hammock, working from the beach, while sipping something refreshing from a coconut. Although the reality we all live in is often different, the important lesson is that it is now possible not to care about where or when you work. If we think about it a little bit more, it is possible to see the significance of all of this. Let's take the case of days-off as an example. Does it still make sense to have two weeks of summer holiday? Or would it be wiser to take your laptop to a more relaxing destination than that office at home? Can an employer have any say about how that would work? Is it acceptable to work from the pool? Let's say it is. Let's say it's ok to work from anywhere in the world, whenever you want. All it would require is some changes to how work is done. Suddenly, it's no longer about the number of hours one works in a day - it is about delivering outcomes. This trend makes the employee responsible for dealing with a specific task within a stipulated timeframe and possibly with a deadline. Here at the Google Workspace Practice at

Wipro, we have always worked like this. Our global team delivers consultancy and support services for our customers across the world from anywhere in the world, 24/7. In many ways, the people working in our practice could work from anywhere, anytime. Extrapolate that a bit, and you could think of an employee as delivering a service - the work is a task that gets done, and the organization pays a fee in exchange. Are today's organizations subscribing to employees for the service that they deliver? It sure does seem to be the case. It looks like 'owning' an employee and dictating what that person does is no longer applicable. Sure, it won't work in any sector, and it means giving potentially too much responsibility to the employee. But it is a realistic alternative! Will this alternative add value to organizations? Can it provide a competitive advantage if done correctly? Would it even be a strategy to survive in an ever-changing world? In certain situations, it can be all of the above. Work from anywhere can be the driving force for an organization to become truly global. It also translates into benefitting customers by always being available from anywhere. Not only that, companies can now focus on finding and working with the best talent in the world and not control how the talent works, freeing them up to align work with their personal life. In the end, finding the right people and ensuring that they stay with the organization as happy employees can be driven by utilizing the possibilities 'work from anywhere' brings. Another critical benefit comes with having a globally distributed workforce with a local presence! Many (enterprise) clients will likely not care where the work is done or when. If an organization can sell solutions and outcomes instead of hours, it can leverage the global possibilities better. And that will place organizations in a strategically more powerful position. Smaller organizations and startups take this for granted. They're aligned more effectively with what is out there to use right now, not held back by structure and systems from the past that dictate how employees should work. With that in mind, organizations now need to deal with the changing world, where Work from Anywhere is no longer a temporary novelty. This trend might be the most significant opportunity of the last decade. Digital transformation is the process of being able to leverage that opportunity. Wipro can help with the technical impact, deliver actual business value and outcome, and help align culture, processes, and procedures. The Google Workspace team at Wipro is always available for a discussion about this subject. Just be mindful of time zones; we might be somewhere else on this planet, where it's 5 pm, and we're just settling into that hammock by the beach. Industry: Erik G. Bosman Change & Transformation Lead, Wipro Erik Bosman is the Change & Transformation Lead for the Google Workspace Practice. He works with enterprise customers to transform their workplace by bringing the Google way of working through change management and technology to increase productivity. Erik is also an experienced trainer and, in that capacity, has trained 1000s of employees at customers to fully utilize Google Workspace. In the evolving landscape of digital workplaces, efficient field service operations are critical in ensuring reduced downtime... appy employees usually stay at their jobs, frustrated workers often don't. Chief human resource officers (CHROs) tell us that the corporate leave of absence (LOA) process is one of the most common sources of employee frustration. Employees often rank their LOA experiences low on the satisfaction scale, using descriptors such as complicated, confusing, inconsistent, time consuming, and unresolved. In a

### Exception-based Scheduling: An Intelligent Approach to Optimizing Utility Maintenance & Repair

---- Arcticle source ---- https://www.wipro.com/blogs/bhawani-sharma/ exception-based-scheduling/ ---- About the Author Contact Wipro Please fill the required details to access the content Exception-based Scheduling In today's world, the crews that maintain and upgrade utility infrastructures are busier than ever. They typically operate over a wide geography, which inevitably leads to travel time. But travel time is isn't "wrench time," so anything that can help utilities optimize scheduling can really improve the efficiency and effectiveness of their crews. One of the best approaches is exception-based scheduling or, as it's sometimes called, rule-based automated scheduling or alert-based scheduling. Exception-based scheduling requires integrating an enterprise work-management system with an enterprise scheduling system to intelligently automate and optimize the process of schedule optimization. This approach makes it possible to reduce travel time, stay compliant with fatigue-management policies, and be flexible enough to handle last-minute problems. Many work and asset management systems as well as scheduling systems have overlapping functions and utilities that make it difficult to establish ownership of process and data. With deep experience in implementing end-to-end solutions for work management and scheduling systems. Wipro can help utilities kickstart business transformations with a predefined process and data ownership templates across systems. This helps utilities reduce the implementation time and lower the total cost of ownership of such transformations. How It Works The cornerstone of an exception-based scheduling solution is a fully automated system that matches demand with scheduling constraints for approval by the utility's scheduling or planning team. The system uses a rules engine so that routine requests are fully automated, and exceptions or tasks that cannot be automatically scheduled are called out and communicated via notifications. The utility's enterprise asset management (EAM) system forecasts the work. Calendar-based preventative maintenance tasks - such as scheduled line inspections or transformer oil collections - are very simple to forecast. For runtime-based

maintenance tasks, historical run-hours can be used Figure 1: Work forecast and capacity demand view for forecasting; a good example would be how many times a relay has operated. Corrective and emergency work can be forecast using historical data. Forecast projects would include the following data points: Scheduling Rules After the EAM system has forecast the work, the tasks are moved to the scheduling system, which needs well-defined rules in order to create an optimized schedule. Some typical examples: There will always be more than one way to plan the work, and it's not always possible to create a schedule that adheres to all the known constraints. That's why it's critical to establish well-defined rules outlining constraints, priorities, and "must haves." Capacity Planning and Resource Levelling Armed with a work forecast and team availability, the exception-based scheduling system matches available capacity against the demands by crew skills and times when the skills are required. The capacity view (an example is shown in Figure 2) can help planners anticipate possible gaps in capacity and take action to optimize schedules. Work orders can be moved around the timeline to adjust demands within the available capacity. Figure 2: Capacity vs demand view Managing Exceptions With this groundwork in place - defined work/activities, personnel and compliance constraints, and capacity planning - the system is enabled to perform exception-based scheduling. That is valuable in itself, but the system can go further, enabling planners to use key result areas (KRAs) and key performance indicators (KPIs) to ensure they are truly optimizing scheduling. Typical metrics might include maximizing in-house maintenance, outsourcing low-priority work, and minimum spends on a crafts/hour basis. Next Steps The key benefit of adopting an intelligent, rules-based or exception-based scheduling solution is automation. The system can create effective, efficient plans with great flexibility and latitude to help prepare for the inevitable. Perhaps more important, automating a substantial part of the scheduling function enables planners and schedulers to focus on higher-value activities. To build and implement rule-based scheduling system is a journey, not a one-step improvement. Different organizations will be at different levels of maturity as they undertake this journey. Wipro can help utilities understand their current maturity state and establish a roadmap for implementing state-ofthe-art and future-ready scheduling systems. In order to embark on journey of modernizing the scheduling function, any organization have work and asset management and schedule management functions implemented and operational. The scheduling parameters should be documented (not necessarily automated). Once those functions are in place organization is ready to leap forward to scale the scheduling business function to the next level. For more details, please visit https://www.wipro.com/utilities/. Bhawani Sharma Consulting Partner at Wipro Bhawani Sharma has 22 years of experience in implementing scheduling systems for Enterprise Asset and Work Management and in related technologies including Geographical Information Systems (GIS), Workforce Management (WFM) and field mobility. Bhawani has worked on several large asset management transformations for utility clients. He has been involved in asset management consulting and has worked with clients on creating and executing IT roadmaps. source ----- https://www.wipro.com/blogs/amit-verma/ ----- Contact Wipro Blogs By Author Overcoming AWS Cloud Security Challenges with Managed Services Please fill the required details to access the content Amit Verma

Amit Verma Practice Partner – Cybersecurity and Risk Services, Wipro Amit is responsible for Wipro's AWS security solutions, offerings, go-to-market and competency, globally. Amit has over 19 years of experience in the domain of cybersecurity, data privacy, e-governance, information security, APM and IT-GRC. He has worked across geographies in areas of consulting, customer experience, sales, presales, delivery and building thought leadership. Digital and cloud transformation initiatives are enabling organizations to adapt to changing business.....

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### Overcoming AWS Cloud Security Challenges with Managed Services

----- Arcticle source ----- https://www.wipro.com/blogs/amit-verma/ overcoming-aws-cloud-security-challenges-with-managed-services/ ----- About the Author Contact Wipro Related Blogs Risk in the ESG Age Exchange of Cyber Threat Intelligence Among Peers Using Decentralized Identity Networks and IoFT Cybersecurity through collaboration Please fill the required details to access the content Overcoming AWS Cloud Security Challenges with Managed Services September | 2021 Digital and cloud transformation initiatives are enabling organizations to adapt to changing business needs more quickly. While leveraging the benefits of 24x7x365 services and modern architectures, enterprises are expecting the cloud to enable the agility to quickly adapt to its future needs, avoid service disruptions, secure their data and workloads against cyber threats, and support demanding regulatory compliance requirements. According to Wipro's State of Cybersecurity Report 2020, 52% of the respondents prioritized scaling up secure cloud migrations during the COVID-19 crisis, while 87% stated they would continue to scale up secure cloud migrations after the COVID-19 crisis. Cloud adoption is transforming the way enterprises leverage data and deploy applications: maintaining a consistently compliant security posture throughout the transformation is a high priority. The Shared Responsibility Model states that AWS is responsible for security of the underlying cloud infrastructure such as compute, storage, database, and networking components. Customers are responsible for the security in the cloud such as its data, applications, operating systems, and client-side and server-side data and network traffic. According to Wipro's State of Cybersecurity Report 2020, 48% of organizations still consider cloud hosting risk among one of the top cyber risks. Cloud security challenges With the agility of the cloud, enterprises are able to accelerate the go-to-market time for their solutions, rapidly iterate on its existing offerings, and adopt new technologies with ease. With this advanced technology available to threat actors as well, cyber threats are becoming more sophisticated and intense. Increased development and adoption of SaaS-based applications by enterprises is also opening up new threat vectors in the cloud. These, like other customer-facing workloads, are often targets of threat actors looking to exploit vulnerabilities, misconfigurations, or inadequate access control management in the frontend systems in an attempt to access more sensitive back-end systems or

data. Data breaches are among the most damaging threats that can cause severe reputational damage, loss of intellectual property (IP), and have financial impact. The complexity of AWS- based security controls and services combined with the increased speed and agility of the cloud can result in misconfigurations, which open threat vectors ready to be exploited by state or non-state actors. User identity has become the new security perimeter. According to Wipro's State of Cybersecurity Report 2020 -Cybercriminals are actively attempting to breach the corporate perimeter by stealing user credentials, and based on the findings of our report, there is a high likelihood that a user credential is overprovisioned and could lead to lateral movement within the enterprise or gain privilege escalation to gain access to sensitive data and resources. Additionally, lack of adequate rotation of cryptographic keys, passwords, and certificates provides a broader attack surface to cybercriminals. It's also a good time to recall that a significant number of attacks are perpetrated by internal threat actors, and these attacks aren't always malicious in nature. Overly broad access to sensitive systems or data exposes the enterprise to potential accidental deletion or modification. Phishing attempts target not just senior executives and IT staff; accessing a junior-level employee account could lead to privilege escalation, access to data, and lateral movement within the network. A vast assortment of AWS native and third party security tools and controls are available to meet the security requirements and compliance needs (regulatory and non-regularity). Often, the complexity of these integrated solutions results in the inability to get a holistic view of potential security vulnerabilities and risks in the AWS environment, which leads to security crevices and opens the enterprise to potential risk. Managed security services for AWS Cloud According to Gartner, through 2025, 99% of cloud security failures will be attributed to the customers. While businesses and enterprises are leveraging the power of cloud computing, it is good to remember that "with great power comes great responsibility". Successful enterprises are resorting to best-in-class cybersecurity services to address the ever-changing threat landscape through service providers who evolve, innovate, and deliver against these cyber risks. Wipro provides 24/7 fully managed security service through its AWS security experts spanning across identity, infrastructure, data, security monitoring and analytics, GRC, and application security. Vulnerability management Vulnerability Management as a Service offers complete lifecycle management of vulnerabilities including scanning, categorization (based on customer environment), and remediation coordination with appropriate company stakeholders. Built on calculation of risk for complete AWS environment, the service offers complete contextualization of vulnerabilities and impact probability specific to the enterprise's assets. It enables the business to discover and remediate active threats against global IT assets. Cloud service usage, best practices, and compliance Delivered through Wipro's IP, Cloud Application Risk Governance (CARG) brings operational efficiency by breaking complexities and providing powerful visibility into cloud application compliance. It monitors security controls for applications on a continuous basis and provides a dynamic application risk view for business and technical stakeholders. It provides visibility into cloud misconfigurations and its potential impact on application risk. Threat detection and response Threat detection and response empowers cyber defense which strengthens business resilience by providing incident

detection, analysis and reporting, and integrated cyber threat intelligence in AWS. The service provides near real-time alerting of critical attack indicator, analytical correlation of indicators to detect advanced threats/attacks, rapid security incident escalation and reporting and security incident kill-chain and causal analysis. Network security Wipro's network security services provide security across the enterprise access, perimeter defence and internet security. Services include managed AWS network ACLs, IPS, DDoS, and third party solutions to ensure cloud compliance, configuration and baseline compliance, coverage of security controls, and access authorization. Host and endpoint security Managed detection and response for AWS based endpoints services offer incident data investigation, detection of suspicious activity, threat hunting, data exploration and stopping malicious activity. Services also offer continuous and comprehensive workload monitoring, including container visibility, ensuring stealthy attacks can be stopped and defence against threats from malware to the most sophisticated attacks. Application security Managed WAF services addresses the OWASP top 10 web application security risks. It offers protection against HTTP application attacks by filtering out threats that could be detrimental to AWS based workloads and data. Secures web and private subnets instances with deep packet inspection and helps prevent cyber-attacks and network vulnerabilities. If you are interested in learning how Wipro is helping our clients achieve their vision of AWS cloud security, connect with us. Industry: Amit Verma Practice Partner - Cybersecurity and Risk Services, Wipro Amit is responsible for Wipro's AWS security solutions, offerings, go-to-market and competency, globally. Amit has over 19 years of experience in the domain of cybersecurity, data privacy, e-governance, information security, APM and IT-GRC. He has worked across geographies in areas of consulting, customer experience, sales, presales, delivery and building thought leadership. A tidal wave of ESG regulations is looming across markets. To prepare, companies are shifting responsibility for sustainability management and reporting to the risk management domain. Risk executives are investing in enhancing their governance, risk management, and compliance (GRC) systems to account for ESG factors. The ability to exchange cyber threat intelligence (CTI) in privacy preserving and in a secure manner is vital for enterprises to manage their security risks effectively. During the pandemic, dependence on digital technologies has seen unprecedented growth. From managing remote workforces to catering for changing customer expectations, the paradigm shift towards digital has Arcticle source ----- https://www.wipro.com/blogs/ganesha-rajanaidu/ -----Contact Wipro Blogs By Author Cyber Threats in Healthcare Please fill the required details to access the content Ganesha Rajanaidu APJ Cyber Consulting Partner - APMEA, Wipro Ganesha has over 17 years of cyber consulting experience across industry sectors in the Asia Pacific region. He has previously served as the Asia Pacific Chief Information Security Officer (CISO) for a multinational pharmaceutical organisation in Australia and held leadership roles at EY and PwC Australia's cyber practices. His expertise in strategy, risk management and incident response help clients develop cyber resilient strategies that drive business outcomes while managing risks 

#### Cyber Threats in Healthcare

----- Arcticle source ----- https://www.wipro.com/blogs/ganesha-rajanaidu/ cyber-threats-in-healthcare/ ---- About the Author Contact Wipro Please fill the required details to access the content Cyber Threats in Healthcare September | 2021 Cyber Threats and Mitigation Strategies for the Healthcare Sector The Australian healthcare sector will need to take urgent steps to counter the growing threat of cyber-attacks, which are growing in number and sophistication. Healthcare players can no longer afford to delay taking decisive steps to protect themselves. These steps include leadership augmentation, increased budgets and policy enhancements, amongst others. The time to act is now. Current cyber threat trends in healthcare Cyber threat actors generally find the healthcare sector as an attractive target because: Fig 1: Why it makes sense for cyber threat actors to attack Healthcare Fragile Cyber Security In Healthcare In Australia: Last year was a highly active year for cyber threat actors who operate within the health sector. In the US, healthcare breaches increased 55.1% in 2020 with hacking and IT incidents representing 67.3% of compromises 2. The Office of the Australian Information Commissioner (OAIC) noted that health was the highest reporting sector (22%) with 518 notified breaches3. During the 2020 reporting period, the Australian Cyber Security Centre (ACSC) experienced an 84.4% increase in the number of security incident reports relating to the health sector4. Although we have seen numerous attacks targeting vaccine developers and sensitive personal information, the most disruptive and growing threat for the health sector is "ransomware". Ransomware is a type of malicious software designed to block access to a computer system (via encryption) until a sum of money is paid. In August 2020, the ACSC released an advisory of ransomware campaigns targeting aged care and health care sectors after a spate of high profile publicly disclosed breaches disrupted operations at these providers5. We anticipate a continued threat of ransomware attacks in the health sector in 2021 albeit with a few changes to their tactics and techniques. Double Extortion: Steal Data Recently, we found ransomware operators exfiltrating sensitive data before they started disabling victim systems. The threat actors then threaten the disclosure of this sensitive data in an attempt to coerce victims to pay the ransom in what is now referred as "double extortion" schemes6. Inherent cyber challenges in the healthcare sector The health sector has several inherent challenges to improve their cyber maturity to a level that is commensurate to the threats faced. These challenges include: Boards are generally not comfortable with unmitigated issues that pose a medium to high risk. Even with the right investment and control environment in place at a point in time, this will require active management and continued investment as the cyber threat environment keeps evolving along with the business. The threats posed require the healthcare sector to prioritize cyber security as an enterprise issue and have the right leadership with adequate resources in place. These inherent challenges also require organizations to think outside the box to effectively manage cyber threats while being a business enabler. Mitigation strategies to consider Our significant global experience managing healthcare environments and responding to cyber

threats gives us the confidence to present to you a summary of mitigation strategies to consider: Summary Wipro Recommends References APJ Cyber Consulting Partner - APMEA, Wipro Ganesha has over 17 years of cyber consulting experience across industry sectors in the Asia Pacific region. He has previously served as the Asia Pacific Chief Information Security Officer (CISO) for a multinational pharmaceutical organisation in Australia and held leadership roles at EY and PwC Australia's cyber practices. His expertise in strategy, risk management and incident response help clients develop cyber resilient strategies that drive business outcomes while managing risks source ---- https://www.wipro.com/blogs/maheedhar-bose-juvva/ ---- Contact Wipro Blogs By Author Communications Service Providers: Evolving From Network Operations to Service Operations Please fill the required details to access the content Maheedhar Bose Juvva Maheedhar Bose Juvva Principal Architect, Domain & Consulting - Comms & Tech, Wipro Limited Maheedhar has 15 years of experience in data- and analytics-driven digital transformation for Communication Service Providers and enterprises. He focuses on innovation driven-data monetization. How do communication service providers (CSPs) deliver a great customer experience...

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### Communications Service Providers: Evolving From Network Operations to Service Operations

----- Arcticle source ----- https://www.wipro.com/blogs/maheedhar-bose-juvva/ communications-service-providers-evolving-from-network-operations-toservice-operations/ ---- About the Author Contact Wipro Please fill the required details to access the content Communications Service Providers: Evolving From Network Operations to Service Operations September | 2021 How do communication service providers (CSPs) deliver a great customer experience? Not that long ago, a CTO or CIO would have focused on the company's network operations center (NOC), looking at metrics like performance and downtime. And, the thinking goes, if the company is providing high performance and minimal downtime, the customer experience must be great. But the customer experience might not be great, even when the data suggests the network is performing well. For example, normal network performance metrics might indicate that the network as a whole is working fine, but if a streaming service customer is experiencing lag - perhaps because of a single streaming server - the customer experience is not great. In other words, today's communications CTO or CIO (and, in fact, the entire the senior team) should evolve from a network operations perspective to a service operations perspective - or, to use the lingo of the CSP, from network operations center (NOC) to service operations center (SOC). The "inside-out" view of the NOC may not be enough to satisfy today's demanding customers and networks increasingly stretched to their limits. What's needed in today's world is an "outside-in" view to understand the customer's actual experience with the network -

moving to "network enabled services and experiences." This is both a mindset shift and an operational shift that harnesses the power of the enormous amounts of data that CSPs amass through digitalization and advanced algorithms to transform their networks into automated, selfhealing, and self-optimizing systems to deliver intelligence that goes well beyond rule-based analysis and workflows. By analyzing myriad events, measures, and alerts, and deriving patterns from them, the SOC approach minimizes downtime and improves the customer experience. Put another way, today's challenge is about shifting the focus from alerts about problems to opportunities to improve services. CX: A Component of Operations Evolving from NOC to SOC is better articulated as a transition to a unified service assurance solution that makes customer experience management an integral component of operations. A unified assurance solution continuously evaluates traditional elements like fault rates and network performance, but goes a step further to turn the network into an automated, self-healing system. A unified assurance solution addresses all three layers that make up the customer experience through a single pane of glass: To deliver on the power of a Service Operations Center approach and provide this kind of unified assurance transparency, a digital solution must be built on these pillars: The benefits of digitalization for CSPs based on these pillars are substantial: Next steps Wipro works with many clients in the telecommunications space to help them take advantage of the power of digitalization and artificial intelligence and make the evolutionary move from a NOC-centric perspective to a SOC-centric one. That experience has generated useful insights on the challenges involved: But these challenges can be met with help from a knowledgeable partner. Wipro's experience in this realm has reveal several key success factors and levers for transformation: The bottom line: Customer experience is becoming much broader - and more important - than network performance. But today's technologies can give CSPs a powerful new way to harness massive amounts of data and use it in multiple ways to improve CX, differentiation, and growth. Learn more about Wipro and digital networks here. Maheedhar Bose Juvva Principal Architect, Domain & Consulting - Comms & Tech, Wipro Limited Maheedhar has 15 years of experience in data- and analytics-driven digital transformation for Communication Service Providers and enterprises. He focuses on innovation driven-data monetization. Vedhanathan Murugaian Solution Architect, Domain & Consulting - Comms & Tech, Wipro Limited Vedhanathan has 14 years of experience in service assurance. He has developed and implemented various solutions for multiple telecommunication companies around the world.

### Transforming Water Data for the Future

----- Arcticle source ----- https://www.wipro.com/blogs/urvashi-gupta/ transforming-water-data-for-the-future/ ---- About the Authors Contact Wipro Please fill the required details to access the content Transforming Water Data for the Future September | 2021 In March 2021, eastern Australia experienced devastating flooding as a result of La Niña weather pattern, which brought greater rain and tropical cyclones during the summer (in the southern hemisphere). Up to 35 inches of rain fell in just four days, and some places saw their worst flooding in 60 years. It also resulted in significant discharge from Sydney's largest dam (Warragamba Dam) - 500 gigalitres of water, which is equivalent to the volume of Sydney Harbor. This event necessitated a review of Australia's capacity to manage and maintain resilient water supply systems. In New South Wales, four agencies manage the operations of the river system and other water delivery systems in eastern Australia. The state's rivers and water supply systems are managed in accordance with the rules set out by NSW Department of Industry. These rules require the utilities to provide authorities with information to keep them updated about the current problems and also provide alternate mitigation measures to help prepare them for the future ones. Most utilities in the world currently use telemetry and Supervisory Control and Data Acquisition (SCADA) systems, often referred to as "operational technology," to monitor and control network operations. It is imperative to understand the impact of seasonal flooding on utility operations; it is also an opportunity to examine the future of water data management using advanced technologies like Internet of things (IOT) and their role in preparing for future unanticipated water related events. The Benefits of Operational Technology Traditional approaches to operational technology (OT) in utilities industry typically strive to create an environment that detects change through direct monitoring of industrial equipment, assets, processes, and events and to effect changes in operations. But new advances in technology are leading to new benefits. Remote sensor data provides authorities with detailed, reliable, real-time information about damaged locations or faulty equipment so that they can take action and undertake damage mitigation measures. Obviously, this is especially important in emergencies when time, safety, and human life are at a critical juncture. Flood water diversion, evacuation, rescue, resettlement, water pollution and related health hazards, and service interruptions are timecritical. Sensors can provide useful, actionable information to help with these use cases: A sensor-based approach is ambitious. A good, modern water data management system will have thousands, and possibly millions, of sensors and data loggers (see section below on Industrial Internet of Things, or IIoT). This demands an equally robust data platform for turning those data into insights and the basis for action. Data is the Foundation Modern technology - in other words digital transformation - is a central component of the new approach to operational technology for efficient data gathering, storing, and making those gathered data useful. To solve current

and future problems in water supply infrastructure, systems must be completely capable of transferring water data to surveillance teams, including operations, maintenance, and disaster management. This will help them in effective monitoring and then responding to any unnatural water level occurrences, etc. at any point of time. Many built-in features of existing water data management systems - including device management, data acquisition, data visualization, alarm and event management, and platform security - facilitate remote monitoring. Yet these characteristics do not convert into robust, effective solutions. Antiquated and inefficient traditional approaches can result in outdated, inaccurate, and incomplete data and asset measurements. Let's throw some light on the differences between application of traditional OT applications and modern IOT-based solutions. The ability to scale installation of IoT-enabled, low-cost data loggers on a cloud platform will unlock opportunities to utilize big data. Utilities must consider how to grow to thousands, if not millions, of sensors and data loggers. The infrastructure upgrade or the digital transformation of data, if done right, can unleash new insights and achieve unparalleled levels of efficiency in the water data management industry, which will eventually put it in the bracket of Industry 4.0. Not Just IoT: IIoT The rise of Industrial IoT (IIoT) in the recent years is slowly, but surely, changing the landscape of the utility industry. Industrial IoT devices make use of innovations like smart sensors, which help to minimize common errors and aid in faster computation, and smart meters, which ensure accurate, digital records of consumption for billing consumers. These IIoT devices bring tremendous benefits to utilities and their consumers, paving the way for the industry's digital transformation journey. Real-time data availability and ease of access to big data is one of the key components which can revolutionize the water data management industry. Utilities, like other industries, can explore the potential use of big data in forecasting events such as floods or in detecting irregularities in water consumption patterns. Furthermore, IOT enables smart incident identification, effective demand forecasting and planning, preventive maintenance, improving water monitoring, and providing flexible access to consumers on their water consumption. IIoT devices are also typically energy efficient, easy to deploy with minimal manual configuration, and available at low prices. They represent a great potential investment for utilities in terms of upfront capital expense and ongoing operational costs. IIoT devices are an indispensable part towards the process of Industry 4.0 transformation. The Future of Water Data Utilities can improve real-time big data analysis by using IIoT devices and IIoT-enabled infrastructure to monitor events and take specific actions based on the data produced by using predetermined policies. This is critical for remote infrastructure and equipment as it will enable preventive maintenance through which issues can be identified and addressed promptly before they become significant problems. The devices also enable the gathering of detailed information to upgrade and expand the infrastructure to other locations. But this data-rich approach can do even more for utilities: The huge benefits which IIoT application can offer to the water industry are the reasons why water utilities are considering the adoption of this Industry 4.0 technology. Embracing this digital innovation early can transform the business to become more future ready and become more efficient to meet the needs of today. Urvashi Gupta Urvashi Gupta is a Control & Instrumentation engineer with 11+ years of experience in the utility industry. As a Principal

Consultant with Wipro's domain and consulting practice, her expertise lies in network solution deployment for advanced network management, digital transformation, and system integration programs. She has a keen interest in innovating OT solution implementation to adapt to the advent of new technologies, business process automation, cloud migration and industry 4.0 strategies. Dennis Tanzania Dennis Tanzania is Lead Consultant in Wipro's Domain and Consulting practice, focusing on utilities industries. His main interest is on SCADA and telemetry system digital transformation, strategizing innovative solution for customers to achieve operational efficiency, data integrity, effective business and operational processes. www.wipro.com/blogs/sayon-sur/ ---- Contact Wipro Blogs By Author Please fill the required details to access the content Sayon Sur Sayon Sur Senior Solutions Architect, Cloud Products and Platforms, Wipro Limited Sayon has 10+ years of experience in architecting, designing, and building cloud based products and platforms across public and private clouds. He has worked in media, automotive, manufacturing, and consumer domains. Currently, Sayon is leading the cloud transformation and modernization journey for legacy platforms including greenfield cloud based product development. www.wipro.com/blogs/richard-beyer/ ---- Contact Wipro Blogs By Author The Risk Outsourcing Fallacy: A Cautionary Tale Preparing for the Australian Critical Infrastructure Act release Please fill the required details to access the content Richard Beyer Richard Beyer Chief Security Officer and Consultant Wipro Ltd Richard recently joined Ampion, a Wipro company, as Chief Security Officer and Consultant. Richard is a highly experienced security and intelligence professional with diverse experiences across the Australian Federal Government and the commercial sector. He has an advanced understanding of applying protective and cyber security, intelligence, risk, and governance and has proven experience in delivering high-profile engagements for a wide range of clients up to and including the Prime Minister. Richard has a friendly and confident persona and a track record of engagement with multinational partners on national security issues. With more than two decades of leadership experience in the direct management and motivation of teams and the application of behavioral psychology, Richard delivers superior security outcomes. In 2016, the Australian eCensus experienced a series of relatively minor DDoS events.... In December 2020, the Australian government proposed major changes to the Security.... ===========

#### Preparing for the Australian Critical Infrastructure Act release

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### The Risk Outsourcing Fallacy: A Cautionary Tale

----- Arcticle source ----- https://www.wipro.com/blogs/richard-beyer/the-riskoutsourcing-fallacy-a-cautionary-tale/ ---- About the Author Contact Wipro Related Blogs Risk in the ESG Age Exchange of Cyber Threat Intelligence Among Peers Using Decentralized Identity Networks and IoFT Cybersecurity through collaboration Please fill the required details to access the content The Risk Outsourcing Fallacy: A Cautionary Tale September | 2021 Summary: In 2016, the Australian eCensus experienced a series of relatively minor DDoS events. In response, IBM, ABS's outsourcing partner, initiated its fortress Australia strategy and geo-blocked non-Australian web traffic. Unfortunately, a router in Singapore was overlooked and the DDoS traffic continued to flood in. When the DDoS finally stopped on its own, IBM's network performance monitoring system indicated outbound traffic from the census system that the company couldn't identify. IBM and the ABS were therefore unable to confidently say whether this traffic was malicious or not. At 8:09pm on Census Day, with a growing sense of panic, the ABS closed the eCensus for fear that it may have lost confidential information and called in the Australian Signal Directorate (ASD) to investigate. Technically, it was a series of unfortunate events: IBM overlooked a router in its planning, couldn't reach key routers due to congestion, and one of its routers rebooted into a default configuration. Additionally, network monitoring was based on the unreliable simple network management protocol (SNMP), which is designed to be dropped during congestion. So, when everything eventually reconnected, monitoring showed a large jump in the cumulative packet counters, and this jump was incorrectly interpreted as data exfiltration. However, the biggest misstep of all came from the naïve assumptions made by the ABS. After engaging IBM, the ABS essentially stopped thinking about the technical threats to the eCensus, including the possibility of DDoS attack. They had engaged a world-leading company. They no longer had to worry about technical issues. The ABS thought that it could pay IBM to take on its risk obligations. Instead, the ABS conflated purchasing technology controls with shifting responsibility to another entity. This mindset continued when the ABS then tried to shift its responsibilities to the ASD. Two days later, when the eCensus was eventually reinstated, the damage was done and the reputation of the ABS and public confidence in the Australian Government's ability to deliver online services was irreparably damaged. Investing in buying controls, mitigations, and other tools and services is a great idea, but it never absolves you of risk that is yours alone. For me, the lesson in the 2016 Census is that cybersecurity can be illusory.

For those who find comfort in buying tools and services, no amount of outsourcing will absolve you of your ownership of these risks and the inescapable accountability that comes when it all goes wrong. It's a much safer strategy to go back to basics on risk and then pick the best solution for the problem. Industry: Richard Beyer Chief Security Officer and Consultant, Ampion, a Wipro Company Richard is a highly skilled security and intelligence professional with diverse experiences across the Australian Federal Government and the commercial sector. He has an advanced understanding of how to apply cybersecurity, intelligence, risk, and governance measures. He has a great track record of engagement with multinational partners on national security issues, and is experienced in delivering high-profile engagements for a wide range of clients, including the Prime Minister. With more than two decades of leadership experience, Richard employs behavioural psychology to effectively manage and motivate teams, ensuring superior security outcomes time and again. A tidal wave of ESG regulations is looming across markets. To prepare, companies are shifting responsibility for sustainability management and reporting to the risk management domain. Risk executives are investing in enhancing their governance, risk management, and compliance (GRC) systems to account for ESG factors. The ability to exchange cyber threat intelligence (CTI) in privacy preserving and in a secure manner is vital for enterprises to manage their security risks effectively. During the pandemic, dependence on digital technologies has seen unprecedented growth. From managing remote workforces to catering for changing customer expectations, the paradigm shift towards digital has brought a host of security challenges. www.wipro.com/blogs/tushar-batra/ ---- Contact Wipro Blogs By Author Please fill the required details to access the content Tushar Batra www.wipro.com/blogs/lakshmi-narasimhan/ ---- Contact Wipro Blogs By Author How to Rethink Digital Workspace in the Hybrid Work Era Please fill the required details to access the content Lakshmi Narasimhan Lakshmi Narasimhan Practice Director - Digital Workplace services, CIS, WiproiCORE Lakshmi has two decades of experience in Business development, pre-sales, Consulting and Program Management in the IT Infrastructure services domain. For the practice, he currently leads engagements with existing client relationships. Primary focus of his role is to work with the larger stakeholder teams to ensure that our clients get the value of the larger DWP practice. He also owns the Wipro TruRemote offering while helping customers across industries with "out of band" remote management solutions. This offering is also integrated as part of the larger DWP offerings - Live WorkSpace<sup>™</sup> and WaaS360. The current pandemic has triggered "new age remote working", or, as the industry refers — the "hybrid work 

### Reimagining Remote Field Support in the Hybrid Work Era

----- Arcticle source ----- https://www.wipro.com/blogs/lakshmi-narasimhan/ how-to-rethink-digital-workspace-in-the-hybrid-work-era/ ---- About the Author Contact Wipro Related Blogs Optimizing Field services Through AR Transforming the leave-of-absence experience into an employee-retention tool A Smarter Way to Collaborate and Build Applications with Azure DevOps Please fill the required details to access the content How to Rethink Digital Workspace in the Hybrid Work Era September | 2021 The current pandemic has triggered "new age remote working", or, as the industry refers — the "hybrid work era". As a result, most employees receive the flexibility of working from the location of their choice, whether office, home, or even an exotic location of their personal preference. This huge shift calls for digital workspace providers to take the workspace to where the users are, while maintaining the basic principles of operations such as 'system stability' and 'system performance' without compromising its security perimeters and ease of operations. Remote working challenges In the ambit of remote working, some of the challenges that the digital workspace providers need to tackle and overcome are: Field-support and device dispatches: With stringent restrictions in place, IT organizations need to rethink the legacy service systems of "hands and feet support" and device dispatches. Adverse user experience: Delays in dispatches prolongs the mean time to resolution, which adversely impact user productivity and user experience. Lack of adequate remote control solutions: Non-availability of a remote management solution that can help administrators to remotely troubleshoot / isolate a problem beneath the OS layer is a major challenge. Is there a solution that can minimize hardware breakdowns and contribute to systems stability and system performance? Even if there is a break-down, can the problem be fixed remotely? Leveraging technology to adapt to new work needs As we step into hybrid work era and as remote work rapidly scales up, there is a strong need for enabling an innovative way of providing remote field support. As we adapt to the post-pandemic working models, IT enterprises' focus should be to provide an integrated and stable workplace with out-of-band remote management capability and yet, be cost-effective. All these should be provided without compromising systems security and system performance, leading to enhanced digital employee experience. Leveraging a combination of in-band and out-of-band management capability holds the key to effective remote field support. With in-band management, the remote session can be established over the OS Layer, that requires the device to be powered on and the user to be signed-in to the device. In contrast, out-of-band management establishes a remote session at the bios level leveraging TLS (Transport Layer Security) communication. Out-of-band management is provided below the OS layer, runs on the hardware level, and does not require the device to be powered on. Wipro TruRemote is powered by Intel vPro®™Platform, which offers an integrated and stable platform that minimizes system disruptions at the thermal, electrical and mechanical level contributing to system uptime and user productivity. This

platform also provides better performance and security against evolving threats. Integrated out-of-band remote management services complement and enhance traditional remote management tools and benefit the user by: How Wipro + Intel® collaboration leverages transformative technology Wipro TruRemote powered by Intel vPro Platform is integrated with Wipro Live Workspace®, an offering built using a combination of technology, tools and services; this new addition to Wipro Live Workspace® enhances its remote field support in these unusual times. The Intel vPro® platform, featuring the modern manageability tools of Intel® Active Management Technology, makes it easy for IT to support worker productivity. And now, the Intel® Endpoint Management Assistant (Intel® EMA) tool lets IT remotely and securely manage devices, inside and outside the firewall, over the cloud. This platform is a system-on-a-chip solution available with all Intel® Core™ i5 vPro®, Intel® Core™ i7 vPro® and Intel® Xeon® processors, that run on Windows operating systems. Intel AMT enables Wipro to manage and troubleshoot personal computers and laptops based on the Intel vPro platform. It is used in combination with Intel® processors and network controllers and is a key component in the "hardware-enhanced" manageability and security strategy. With Intel AMT technology, Wipro provides remote diagnostics, remote troubleshooting and maintenance activities, image management, and cost reduction. Wrapping up COVID-19 has necessitated changes that are here to stay. Regardless of when the pandemic subsides, we are likely to witness significant increase in remote working than ever before. So a combination of in-band and out of band remote management solutions are necessary in reducing MTTR, which will significantly contribute to improved user experience and user productivity. For more details on in-band and out-of- band remote management solutions from Wipro and Intel, connect with us. Industry: Lakshmi Narasimhan Practice Director - Digital Workplace services, CIS, Wipro- iCORE Lakshmi has two decades of experience in Business development, pre-sales, Consulting and Program Management in the IT Infrastructure services domain. For the practice, he currently leads engagements with existing client relationships. Primary focus of his role is to work with the larger stakeholder teams to ensure that our clients get the value of the larger DWP practice. He also owns the Wipro TruRemote offering while helping customers across industries with "out of band" remote management solutions. This offering is also integrated as part of the larger DWP offerings - Live WorkSpace<sup>™</sup> and WaaS360. In the evolving landscape of digital workplaces, efficient field service operations are critical in ensuring reduced downtime... appy employees usually stay at their jobs, frustrated workers often don't. Chief human resource officers (CHROs) tell us that the corporate leave of absence (LOA) process is one of the most common sources of employee frustration. Employees often rank their LOA experiences low on the satisfaction scale, using descriptors such as complicated, confusing, inconsistent, time consuming, and unresolved. In a world where business is evolving at the speed of thought, rapidly changing market conditions pose several challenges for enterprises across industries. www.wipro.com/blogs/vinay-kavde/ ---- Contact Wipro Blogs By Author Driving Supply Chain Resiliency with Industry 4.0 Please fill the required details to access the content Vinay Kavde Vinay Kavde Consulting Partner Vinay Kavde is a consulting partner with Wipro and works with a portfolio of

### Driving Supply Chain Resiliency with Industry 4.0

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initiatives as a company. Start small and scale is the mantra. Consider the lighthouse approach, where digitalization is initiated in select factories as pilots so the organization can realize business impacts quicker and make any necessary adjustments. When starting the digitalization process, consider the low-hanging fruit, initiatives that address immediate challenges or business goals: increasing transparency/visualization for real-time manufacturing intelligence, digitalizing manual processes such as quality control, monitoring and standardizing assets/process performance with digital twins. Success stories Over the last few years, Wipro has provided strategic support to help clients digitalize their manufacturing operations. For a leading personal care company, we conducted an Industry 4.0 maturity assessment, then developed short-term and long-term transformation roadmaps with clear business cases and anticipated impacts. We developed and implemented intelligence-based manufacturing solutions through a Digital Wall — a large electronic display on the wall that collated key performance metrics across plants for real-time performance management. This enabled operations to monitor KPIs such as OEE, waste, and yield on a shift-by-shift basis for more informed decision-making. We also leveraged digital twin capabilities to help a leading F&B manufacturer optimize process performance, such as addressing schedule variances due to demand fluctuations. In this case, we implemented Wipro Smart Factory solutions with focus on autonomous maintenance and digital scheduling as a means of synchronous scheduling and execution. By implementing daily direction settings, we enabled the client to track performance in real time, for significantly enhanced decision making. Digitalizing processes can help manufacturers build more efficient, resilient operations. To make the most of these upgrades, businesses need to approach the transformation process holistically, developing a comprehensive strategy that accounts for the various interactions — both internal and external — of the modern factory. Industry: Vinay Kavde Consulting Partner Vinay Kavde is a consulting partner with Wipro and works with a portfolio of retail and consumer product clients in B2B and B2C ecommerce, omni-channel and supply chain. Sriram Bharadwajan Managing consultant Sriram Bharadwajan is a Practice Leader driving CPG Industry 4.0 charter at Wipro. An established leader with 25 plus years' experience carrying deep domain expertise in manufacturing, product innovation and supply chain management across industry verticals, he has led several digital transformation initiatives working with F50 clients through assessment & blue printing, solution architecting and deployment improving operational efficiencies, throughputs, etc. impacting bottom line and top line. The consumer packaged goods (CPG) industry was badly affected by the pandemic, much like several other industries. Organizations in this industry therefore relied on retail As the retail sector continues to adapt and evolve to a postpandemic environment Srini Rajamani, senior vice-president & sector head consumer and life sciences at Wipro Limited, discusses how customer expectations in 2021 have been shaped by COVID-19

===========================----- Arcticle source ----- https:// www.wipro.com/blogs/rob-farahani/ ----- Contact Wipro Blogs By Author MESC 2022 Reflections: MMIS Modernization and Its Value to States MESC 2021 Reflections: How To Make A Modular MMIS The Easy Way Please fill the required details to access the content Rob Farahani Rob Farahani State and Local Consulting, Wipro Limited You can connect with Rob and reduce the Total Cost of Ownership of your MMIS solution by 50%. This year's event was the largest gathering in the history of the Medicaid Enterprise System Conference (MESC) according to the New England State Consortium Organization (NESCO), the organizers of the event. Getting back to business after longing for a return to pre-pandemic life was a collective feeling

#### **MESC 2021 Reflections:**

#### How To Make A Modular MMIS The Easy Way

----- Arcticle source ----- https://www.wipro.com/blogs/rob-farahani/ mesc-2021-reflections-how-to-make-a-modular-mmis-the-easy-way/ -----About the Author Contact Wipro Please fill the required details to access the content MESC 2021 Reflections: How To Make A Modular MMIS The Easy Way October | 2021 A unique, first-time feature at MESC 2021 Getting back to business after longing for a return to pre-pandemic life was a collective feeling which 1000+ in-person attendees at the Medicaid Enterprise System Conference (MESC) this felt this year. This year's conference was hosted by the New England States Consortium Systems Organization (NESCSO) at the Boston Convention Center the week of August 9. MESC facilitated an integrated and coordinated conversation between Centers for Medicare & Medicaid Services (CMS), State Medicaid program stakeholders and Medicaid Management Information System (MMIS) Vendors to identify their symbiotic needs and create a delivery system that positively influences health outcomes ensures efficient use of funding. I attended a session hosted by National Association of State Purchasing Officers (NASPO) with representation from several states. Here, members were soliciting support for states to sponsor additional MMIS solution offering through NASPO, as its been used by states for general procurement for decades. Also, for consortium procurement of solution and services by states in support of their MMIS modernization to achieve modularity as described by CMS MITA 3.0. What this means for technology vendors States and vendors share a common mission - to deliver healthcare services which improves the lives and health of the covered population all while delivering care at reduced costs. They met at MESC to discuss how the changing landscape of CMS Certification will affect procurements and new procurement modalities (e.g., NASPO). The new CMS directive for states to utilize modular solution offerings to modernize their legacy MMIS has massively shaped the vendor landscape for MESC. Historically, conferences were geared toward large suppliers who provided monolithic MMIS solutions. The current landscape and technology trend is on the use of smaller "best-of-breed" specialty module solutions, providing platforms for new and smaller suppliers to present their specialty solutions. Participation in MESC is anticipated to grow given that most states are embarking on multi-year journeys for modernization and replacement of legacy MMIS systems. Wipro's Enterprise Medicaid as a Service (EMaaS) Core Claims Module is one of the five

qualified and empaneled offerings to states through NASPO. Our booth at the conference was strategically (and perfectly!) located in front of the food booth - arguably the highest foot traffic aisle! Where is the focus at MESC 2022 States looking for technology solutions that are cost effective, quick to market, and meet everchanging business goals is not only tough, it is extremely difficult! Moreover, the technology shift from large legacy monolithic systems to commercial off-the-shelf (COTS) to a multi-vendor modular "best-of-the-breed" MMIS solution has been more challenging than anticipated. There is going to be a huge focus on data and analytics geared towards increasing operational and outcome efficiency in the future. I learned that negotiation and open communication need to occur so that requirements that are impactful can be delivered and measured accordingly - making sure that the State Medicaid Agency receives the intended benefit from its investment (both time and money). I look forward to attending MESC 2022 and helping state Medicaid agencies make the most of their technology investment in a world of increasing compliance and shrinking budgets. See you there! Rob Farahani State and Local Consulting, Wipro Limited You can connect with Rob and reduce the Total Cost of Ownership of your MMIS solution by 50%. ==============

#### MESC 2022 Reflections: MMIS Modernization and Its Value to States

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eliminate disparities that have become entrenched in our health systems. The CMS is designing and implementing policies and programs that support quality health outcomes for all people, including those who are traditionally underserved. What this means for technology vendors Vendors can make sure states' transitions to a new normal are handled efficiently, empathetically, and equitably. While some organizations may be apprehensive about making the necessary changes for fear of the unknown, effective planning can mitigate risks and help alleviate member and provider concerns about change. States looking to modernize their MMIS are deliberating operating models and procurement strategies. The current technology trend is to use smaller "best-of-breed" module solutions, providing platforms for new and smaller suppliers to present their specialty solutions. Wipro's Enterprise Medicaid as a Service (EMaaS) Core Claims Module is one of the five qualified, empaneled solutions offered to states through NASPO. Vendors can also help states strengthen their testing and analytics capabilities, enabling them to generate the results and metrics required by the CMS to receive SMC certification. Data-driven care allows for more transparency and accessibility of information, leading to better engagement and experiences for Medicaid members. Looking ahead: The focus for MESC 2023 The presentations that I attended centered on smaller but critical priorities within various Medicaid programs, particularly leveraging data to advance health equity. This is an important point to focus on because analytics help states identify disparities and direct efforts and resources to address them. I believe negotiation and open communication need to occur between the CMS, states, and vendors, so that technology requirements can be met and impact can be measured accordingly, such as making sure that the State Medicaid Agency receives the intended benefits from the time and money it has invested to align Medicaid systems with CMS policies and programs. The energy at MESC 2022 this year was high, and it was inspiring to see everyone coming together with the shared purpose of driving Medicaid forward with technology. I am so grateful to work at a company like Wipro that is committed to supporting this mission, that is improving Medicaid by delivering solutions that complement the goals of the CMS and states. I look forward to seeing the advancements this year's event inspires. See you next year at MESC 2023 in Denver! Rob Farahani State and Local Consulting, Wipro Limited You can connect with Rob to build your MMIS Modernization roadmap today. Label and artwork management in medical device companies are still seen as an afterthought and therefore, there is not enough concentration as well as investment in this area. However, with new updates such as traceability (UDI) and elabeling, companies are compelled to invest time and money to be compliant on the regulations required. The employee healthcare benefits reckoning is here. The enduring impact of COVID-19 has converged with digital transformation - especially the accelerated advancement of data collection and analytics - to create sweeping changes in employee-employer relations. The chaotic pace of change in managing remote workforces and retaining top talent has placed an enormous strain on employers. Meeting bottom lines while addressing significant increases in employee healthcare costs and premiums can become an existential struggle. The COVID-19 https://www.wipro.com/blogs/nikhil-kohli/ ----- Contact Wipro Blogs By Author Five Ways to Build a High-performing Culture for a Distributed

Workforce in the New Normal Please fill the required details to access the content Nikhil Kohli Nikhil Kohli General Manager & Global Head - Go -to-Market & Delivery for Wipro HR Services & Insurance At Wipro, Nikhil is responsible for driving go -to-market (GTM) Strategy for HR Services (Acquired Alight Solutions captive in India) and the insurance business. His expertise lies in transitions and program management (transformation deals, multi geography, vendor to vendor, re-badging, setting up new sites), deal solutioning & pursuit management, due diligence, mergers & acquisitions (M&A), insurance BPO solutions & delivery, and demand generation for IT services business among others. Nikhil holds a bachelor's degree in Electronics (E&TC) from Pune University. Prior to Wipro, he worked with NTT DATA Services, Dell International Services, and Deloitte. A doting father of two, he likes to read books and listen to podcasts in his free time. These are uncertain times. With no end in sight to the COVID-19 pandemic...

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#### Five Ways to Build a Highperforming Culture for a Distributed Workforce in the New Normal

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nurtured and managed. Since HR has been front-ending the ongoing disruption from the start of the pandemic, I believe its role will become more pronounced in building a corporate culture that is super agile, stronger, and high-performing. I would like to offer some recommendations to all my peers who are strategizing to navigate organizations through the troubled waters of change. Researchers have firmly established the relationship between corporate culture and business performance. Organizations like Starbucks, Ritz-Carlton and American Express have shown that corporate culture paves the way for employee productivity, competitive advantage, technological adoption, and financial performance. These organizations have turned corporate culture into a strategic asset. So can we. Try out these 5 tips to transform your company culture into a strategic benefit and achieve the new "work" order. Since HR and technology are now at crossways, I see technology playing a pivotal role in building a high-performing corporate culture to ensure post-pandemic success. In the same spirit, my colleague, Jasjit and I have listed top recommendations for a tech-driven road map to ensure a high-performance corporate culture by ensuring positive employee experience' in our playbook. Understand how organizations can utilize new-age tech to build positive employee experiences and create a resonating corporate culture remotely. Industry: Nikhil Kohli General Manager & Global Head - Go -to-Market & Delivery for Wipro HR Services & Insurance At Wipro, Nikhil is responsible for driving go -to-market (GTM) Strategy for HR Services (Acquired Alight Solutions captive in India) and the insurance business. His expertise lies in transitions and program management (transformation deals, multi geography, vendor to vendor, re-badging, setting up new sites), deal solutioning & pursuit management, due diligence, mergers & acquisitions (M&A), insurance BPO solutions & delivery, and demand generation for IT services business among others. Nikhil holds a bachelor's degree in Electronics (E&TC) from Pune University. Prior to Wipro, he worked with NTT DATA Services, Dell International Services, and Deloitte. A doting father of two, he likes to read books and listen to podcasts in his free time. Despite the long-standing history of private pension plans, superannuation was introduced to Australians over 20 years ago to help them support their retirement in a financially viable way. Fast forward to 2020; it is now a A\$3T business. Over the last two decades, superannuation has become complex, highly regulated, and vulnerable to scandals. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just neglected www.wipro.com/blogs/vipul-tankariya/ ----- Contact Wipro Blogs By Author Cloud Conversations: How leading companies use Wipro's AWS Cloud Optimization Assessment Service for impressive results Please fill the required details to access the content Vipul Tankariya Vipul Tankariya AWS CCoE (Cloud Centre of Excellence) Lead for Wipro AWS Business Group He has a broad range of experience in cloud consulting from technical as well as strategic perspective. He has worked with several customers across the globe, solving their business problems in terms of technology and strategy. He speaks at various AWS events and meetups and carries multiple AWS certification besides being officially recognized as an AWS Ambassador by

Amazon. He has co-authored two books on AWS. Vipul is an accomplished senior cloud consultant and technologist with more than 22 years of experience and is focused on strategic thought leadership focused on next-generation cloud based solutions. Whether you are developing cloud native applications on Amazon Web Services (AWS)

# Cloud Conversations: How leading companies use Wipro's AWS Cloud Optimization Assessment Service for impressive results

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technical landscape demands changes as the business landscape evolves. You may not need the same resources, sizing, and availability of the resources as time progresses. Also, it is likely that the business demand has increased, and it has had an impact on RTO and RPO of the workloads. Similarly, the threat landscape keeps changing - if you do not regularly assess workload security, you may be running a risk. Besides, with rapidly evolving cloud services, you may be missing out on many opportunities for simplifying your workloads using newer services, and reducing operational overheads. Hence, a review of your workloads every three to six months is highly recommended. Sindhu: What are the benefits reaped by customers with this service? Can you share a little bit about what the customer experience has been like? Vipul: There are many benefits of performing wellarchitected reviews of the workloads. With regular reviews and implementation of the recommendations, customers can build and deploy their workloads faster, lower or mitigate risks, make informed decisions, implement AWS best practices, and optimize the overall cost to run their workloads. The recommendations generated at each pillar help in running and monitoring systems to deliver business value while continually improving processes. It helps in protecting data, systems and assets while delivering business value through risk assessment and mitigation. Organizations can recover fast from infrastructure or service failures and dynamically acquire computing resources to meet demand. You can use compute resources efficiently to meet system requirements and avoid/ eliminate unwanted costs while spreading expenditure awareness. Sindhu: Can you share what that journey would look like for the customer? Vipul: Well Architected Review Process is divided into four phases - Pre-Review Planning, Review, Analysis and Recommendation Development, Executive Summary Generation. In Pre-Review Planning, a date and time for the review is decided and the priority workload is identified. We also share a complete discovery questionnaire with the customer team that they can fill offline. All the stakeholders for the workload are identified and invited for the review. The WAR Ambassador performs an on-site face to face review, or the review is performed remotely. The WAR Ambassador understands all the critical aspects of the workload in conversation with the respective stakeholders. Subsequently a collaborative review of the completed discovery questionnaire is performed and its alignment with the five pillars of Well-Architected Framework is discussed in detail. In the subsequent stage WAR Ambassador focuses on Analysis and Recommendation Development. All the data gathered in the previous stages are analyzed to create findings. Such analysis helps in finding any immediate risks and potential cost savings. After thorough analysis and deliberation, a detailed recommendation report along with priority improvement plan is generated. The last and the most important stage in the review process is to generate an executive summary with actionable items. This stage focuses on recommendations that are based on business implications of your workload design decisions. A prioritized improvement plan based on the core framework pillars is generated. This executive summary is used for a detailed discussion with the customer stakeholders and next steps are decided to implement the recommendations. Sindhu: Can you walk us through Wipro's journey of integrating WAR into our existing business process? Vipul: Wipro's AWS Cloud Optimization Assessment Service based on AWS Well Architected Framework is at the heart of our approach to

setting up customer workloads on AWS. Wipro teams follow design principles on general design, security, operations, reliability, performance, and cost while designing target environment for a customer workload. However, all best practices are followed during the inception of the projects, we keep recommending customers to periodically assess their workloads for keeping its alignment with AWS Well Architected Framework. Sindhu: I am sure our readers would benefit by understanding our alignment with AWS account teams, solution architects and AWS professional services in this entire process. Can you talk about that? Vipul: Wipro is globally one of the largest AWS partners and AWS certified WAR partner. There are dedicated partner solution architects, AWS SMEs and Business Development Managers who work with Wipro teams across multiple geographies. This alliance team from AWS is an extended part of Wipro and we work on a common goal to generate value for our end customers as a single team. AWS team works together with Wipro team from day one to ensure customer success jointly. Sindhu: Does this service cater to specific workloads? Vipul: All or any workload that is hosted on AWS can utilize Well Architected Review for optimizing the way it operates on AWS. Sindhu: How many Wipro customers /enterprises adopt the recommendations from the Wipro AWS Well Architected Review Program? What's the average cost saving? Security issue must have been identified in each case. Vipul: While we do follow the design principles on each of our AWS engagements, we also perform periodic Well-Architected Reviews for many customer workloads depending up on the type of engagement we have with them. The benefits of such reviews vary. We have worked on certain customer workloads wherein we have optimized the AWS consumption cost by up to 70% in certain cases. It depends on where in the level of maturity the customer workload stands at the time of initiating the review. Yes, we have also identified and addressed certain high risk line items on customer workloads. Such periodic reviews of the workloads help us in proactively identifying and addressing the risks before they transpire into any disaster. Sindhu: Have you seen any resistance from customer teams while performing such reviews? And how do we overcome that? Vipul: Customers do understand the importance of this process. It is rare that we come across customer stakeholders who feel this exercise is a process of fault finding, but it is not. We not only highlight risks and areas of optimization but we also highlight aspects of the workloads that are well-architected. It's nobody's fault if there is misalignment between the technology landscape and the business landscape, it's the time decay. Cost of inaction is more than identifying and addressing the issues with such reviews. Customers do understand this and proactively work with Wipro teams in aligning their workloads with the guiding principles. As I have mentioned earlier, technology landscape as well as the business landscape keeps changing and such reviews are a journey and not a destination. Sindhu: Thanks Vipul for sharing your insights on this. For conducting Well-Architected Reviews of your workloads, please reach out to Wipro AWS Business Group Industry: Vipul Tankariya Chief Architect, Wipro AWS Business Group He has a broad range of experience in cloud consulting from technical as well as strategic perspective. He has worked with several customers across the globe, solving their business problems in terms of technology and strategy. He speaks at various AWS events and meetups and carries multiple AWS certification besides being officially recognized as an AWS Ambassador by Amazon. He has co-authored two books on AWS. Vipul

is an accomplished senior cloud consultant and technologist with more than 22 years of experience and is focused on strategic thought leadership focused on next-generation cloud based solutions. Sindhu Vidyasagar Global Alliance Manager, Wipro AWS Business Group She is a cloud aficionado and a seasoned business development executive with broad experience in developing and executing on creative go to market initiatives and strategic alliances. She is passionate about combining the right tools and people to drive business and success for customers and partners. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business benefits that come with them. ========= Arcticle source ---- https://www.wipro.com/blogs/pradeep-agarwal/ -----Contact Wipro Please fill the required details to access the content ===============

### Digital & Robo Advisor: A Big Opportunity for the Australian Wealth Industry

---- Arcticle source ---- https://www.wipro.com/blogs/pradeep-agarwal/ digital-robo-advisor-a-big-opportunity-for-the-australian-wealth-industry/-----About the Author Contact Wipro Related Blogs Metaverse: Business Implications, Monetization Models and Adoption Challenges How blockchain can hack-proof a supply chain Agility is Hard Because Its Soft Please fill the required details to access the content Digital & Robo Advisor: A Big Opportunity for the Australian Wealth Industry November | 2021 Figure 1: Factors influencing growth in financial advice. This is a unique opportunity for financial institutions like banking, super annuation and wealth management firms, as most of these entities offer advisory services through licensee organizations or independent financial advisors. However, with post-Royal commission interventions and amidst consolidation within the Australian wealth and super industry, over 9,000 financial advisors have exited the markets. By 2023, these numbers are expected to drop further, from 19,000 currently to 13,000, representing more than a 50% decline from 2018. This abrupt exit has created a significant supply-demand gap for existing customers, licensees, and associated institutions. That gap is likely to increase further by 2030, with Australia's population expected to reach thirty million, and only seven million people expected to have access to a financial advisor In addition to the supply-demand gap, the cost of financial

advice offered by human advisors has also grown by almost 30% in the last two years, to the present median fee of over \$3,000 a year4. This high costs is unviable, as it limits the scaling of financial advice in human-advisor centric models. The scarcity of advisors and high cost of advice present a unique opportunity for financial service providers to pull ahead by providing universal access through a technology-enabled digital financial advisor. The necessity of an affordable financial advisor Affordable financial advice is an integral part of providing personal financial planning services to customers. Hence, it is a good time for financial institutions like bankers, insurers, wealth services providers, and super funds to develop affordable and scalable financial advice as a strategic area and focus on developing capabilities for robo- advisory. While automation and robo advisory services are the two major trends governing the strategic orientation of financial institution, several market leaders have adopted robotic process automation (RPA) to automate statements and routine transactions, which helps optimize cost and establish automated processes. However, in contrast to implementing automation initiatives, digital robo advisor require a more strategic approach as it offers both opportunities and challenges, which demands due considerations (Figure 2 below). At one end, robo advisors can significantly cut costs and increase scalability. On the other hand, the cost and effort required to develop a digital robo advisor capable of providing personalized "human-like" financial advice is significant. The short-term business case for robo advisors may not be immediately justifiable and is a likely limitation. Firms should therefore adopt a more holistic approach that focuses on developing robo advisor services strategically and gradually. Figure 2: Challenges and considerations of digital robo advisor. A holistic approach to develop comprehensive robo advisor The capabilities and scope of a robo advisor depend on the organization's business plans and investments in new initiatives. Financial institutions should develop a roadmap to align the development of their robo advisor services with their business models, strategies, and shifting customer needs. The framework below provides an agile approach for a typical financial institution with an established advice channel. For more detail on scope, challenges, and future opportunities, read our report "Future of Robo-Advisors in Investment and Wealth Management." This agile framework in Figure 3 outlines a systematic approach to digital enablement, which can help in achieving a comprehensive digital robo engine. This approach also encourages firms to gather insights on customer experiences and human advisors, then use these insights to train their advisor engines, helping them develop into more competent, end-to-end robo advisors. Figure 3: Roadmap for digital & robo advisor enablement. The roadmap in Figure 3 can help financial institutions by encouraging a steady transformation from generic to specialized financial advisory engine. Its stepwise approach also guides firms through incremental investments that have the flexibility to accommodate dynamic customer needs, and the progressive development of robo advisor capacity to gradually reduce dependency on human teams. To see this roadmap through, financial institutions need to develop the capability blocks described in Figure 4. Figure 4: Capabilities map for digital & robo advisors. Firms can get closer to achieving the capabilities in Figure 4, in sync with the roadmap in Figure 3, by employing a highly collaborative approach that combines people, technology, and digital to deliver the following: The way forward By embracing technological advancements,

financial institutions can reduce their dependency on human-centric models to a more scalable digital model. However, to customers seeking both human and digital financial advice, firms need to adopt a hybrid approach that keeps human advisors relevant while developing robo advisors. Despite the growing demand for financial advice, there are challenges like low availability of financial advisors and the growing cost of delivering financial advice. Robo advisors can help financial institutions serve the mass-affluent segment with low affordability while extending their reach to underserved customers. With limited human advisors, firms can focus more on serving the HNI/UHNI segment. The robo advisor would also enable them to offer hybrid services, which would suit the investment needs of the affluent class seeking both humans and robo advice. Hence, transitioning from a humanonly model to a hybrid-digital model would enable financial institutions to leverage their investments in people and technology, and offer superior customer experience to Australian investors. Figure 5: Affordability vs. complexity of Investment needs by investor class. Transitioning from a human-centric model to a hybrid-advisory model with digital robo advisors can help Australian financial institutions increase efficiencies in the following ways: Conclusion Australia's robo advice market has the potential of \$60 billion in funds under advice5. The digital and robo advisor offers a unique opportunity for financial institutions to bridge the supply-demand gap. Financial institutions can adopt robo-advisory-driven financial advice models and launch their offerings to increase their scale and volumes. Digital and robo advisory capabilities seek strategic investment and offer significant growth opportunities for Australian financial institutions. Therefore, considerable efforts with a focused approach are required to secure long-term sustainability and potential value creation for Australian investors in their financial planning decisions. References Industry: The Metaverse is collapsing the physical and virtual worlds to create a paradigm shift in interactions between customers, suppliers, partners, employers and employees. It's every company's worst nightmare. In 2019, a global metals manufacturer experienced a ransom-ware attack in which hackers seized and encrypted its computer files, then demanded payment to unlock them. Agility as a concept has been discussed for years, though the competitive advantage of being more agile came into sharp focus in 2020. The increased pace of change, rapidly evolving customer needs, compressed timeframes for responding — all of these and more drove the topic back onto every https://www.wipro.com/blogs/oded-shoshany/ ---- Contact Wipro Blogs By Author Cloud-based Core New Paradigm in Digital Banking Please fill the required details to access the content Oded Shoshany Oded Shoshany Partner at Wipro Consulting and a Leader in the Core Banking Transformation Practice Oded is an industry veteran with over 20 years of experience in core banking design and implementation, core platform modernization, online banking, mobile banking, digital payments, and digital automation technology innovation. An industry thought leader and keynote speaker, he specializes in envisioning and developing cutting-edge banking digital transformation channels and pioneering the modernization of legacy core banking platforms to the cloud. Swift changes in customer expectations are driving massive transformation in the banking industry. To meet these high expectations, banks need to adopt new technologies that

## Cloud-based Core New Paradigm in Digital Banking

----- Arcticle source ----- https://www.wipro.com/blogs/oded-shoshany/cloudbased-core-new-paradigm-in-digital-banking/ ---- About the Authors Contact Wipro Related Blogs A New Generation Emerges in India's Evolving Payment System For a successful BFSI cloud transformation, build your complex landing zone right Modernizing the Core Banking System: Enabling the Future Please fill the required details to access the content Cloud-based Core New Paradigm in Digital Banking November | 2021 Swift changes in customer expectations are driving massive transformation in the banking industry. To meet these high expectations, banks need to adopt new technologies that help them become data-driven institutions. Further accelerating the situation is rising competition from non-bank (neo) tech companies. Moreover, the emerging business model of digital-only banks has attracted significant interest across the global financial services industry. In the US, 23.1 million customers transact with digital-only banks and this customer base is expected to reach 47.5 million by 2024 (19.8% CAGR from 2020). Instrumental to the success of these banks is their commitment to provide a seamless customer experience, driven by innovation, low costs, and efficient processes. Trends that matter today for banks 1. customer expectations Customers no longer consider banks as just custodians or guardians of their money. This is because tech megaliths have completely redefined the user experience for their customers, which has shifted customer expectations to a new trajectory in the financial services Hyper-personalization Hyper-personalization has been and continues to be the holy grail, the enduring aspiration for the services industry, with banks too having started investing in such tools to engage with customers in real-time and deliver products and services most aligned with their needs. AI/ML-driven processes are making it possible to analyze customer patterns, credit histories, and other unstructured data to create realistic data models for recommending financial services based on customers' lifestyle choices. 3. Data-driven institution Banks are adapting and transforming their business models to serve the growing millennial and Gen Z populations. This demographic is making use of banking and financial services predominantly through digital channels and has a significantly lower penchant for traditional business models. These tech-savvy users have forced financial institutions to adopt data-driven business models. 4. Emergence of tech companies Today, digital transformation has prompted tech companies to enter the banking and payments sector. Big techs and FinTechs continue to make significant inroads into the banking system, specifically targeting millennials and Gen Z customers. The end-to-end customer experience provided by them is propelling banking services toward innovation in delivery and real-time processing. Cloud-based core to accelerate the future of banking Legacy core banking systems are built on outdated technology and present numerous challenges to incumbent banks

in the form of a lack of agility, scalability, and innovation. This also acts as a deterrent to the business transformation agenda of banks. Moreover, cloudbased core banking systems are making it easier for non-financial firms to launch banks and new service offerings, thus questioning the relevance of legacy operations in traditional banking. A recent Wipro FullStride Cloud Services global study Making Business Thrive: A Cloud Leader Roadmap for Achieving 10x ROI found that cloud boosts the performance of financial services firms in the US, lifting revenue by up to 7.8% for those that are leaders in cloud usage. US firms on average see an ROI of 30% on their cloud investments, along with greater market share, higher revenue, lower costs, increased profitability, and improved risk management. Therefore, large banks are evaluating their core banking platforms and closely monitoring market trends to embark upon a core banking modernization Hand-cuffed by Legacy systems Emerging customer expectations have accelerated the need for digital transformation, as new banking offerings are likely to be delivered to the market within days/weeks, not months. FDIC Chairman Jelena McWilliams recently mentioned that banks' reliance on outdated legacy systems is her foremost concern for the sector. "Large banks have been slow in up-gradation of their old IT systems as nearly 50% of them do not update these systems at the right time. Moreover, 43% of US banks still use COBOL, a programming language dating from 1959, and extra layers embedded on top of it are causing regular outages" 2. The Need for Change Banks are rethinking their longterm approach to core banking systems (CBS). Their current CBS platforms, in many cases, are legacy, rigid, difficult to expand and maintain, and being challenged by the emerging digital banking ecosystem. These CBS platforms lack the agility, innovation, and operational efficiencies to address the everchanging customers' banking needs and expectations. Therefore, banks are evaluating different approaches to core modernization, ranging from big bang, rip-and-replace approach to a progressive transformation. "Over 50% of mid-market banks (USD 10-100 billion of assets) believe in progressive transformation and gradually reduce the dependency on legacy core banking systems. Approximately 69% of mid-market banks are at varying stages of their core banking modernization journeys and around 27% are yet to embark on the journey but believe it is an immediate priority for the bank." Cloud-based core and Business Transformation Cloud-based core banking strategies are on the rise within a broad range of banking segments and are witnessing an expansion in different geographies. Many banks are considering public cloud deployment a primary objective of their core banking modernization program. Some analysts predict that banks would largely shift to a cloud-based microservice architecture in the next few years. This is largely aligned with business needs, which include the introduction of new offerings, fast-to-market, low-risk phased implementation, and reduce IT costs (up to 50% vs. legacy). "Global core banking modernization/transformation opportunity is expected to grow from USD 9.4 billion in 2020 to USD 35 billion by 2028 (CAGR of 18%) with around one-third the banks considering a cloud-native solution for modernization." Ways to approach legacy core modernization Legacy core banking has been the mainstay of banks all over the world with banks making significant investments to maintain and upgrade these systems. However, the creation and delivery of banking products and services to customers is changing rapidly with the growing adoption of digital banking

and the usage of emerging technologies such as APIs and cloud. As the banking business is increasingly evolving into a real-time - available anytime/anywhere, data-driven, AI/ML-driven, hyper-customized to users' needs, and with very short time-to-market requirements - a new generation of cloud API-driven CBS will be needed to deliver a banking platform designed for change and to meet the demands of the future. Highlighted below are four core modernization approaches that banks can choose as they embark upon this journey. Approach 1: Focus on a specific business area This approach involves the modernization of a specific business area and does not encompass legacy core migration. The key focus is to reinvent business digital processes and launch a minimal viable product (MVP) within six months, particularly on the cloud. Business value drivers include faster product launch, expanded digital banking offerings, and the beginning of a legacy core modernization journey. The key intent of banks is to respond to changing customer needs quickly while maintaining the business relationship and market share. The risks of this approach are 1) cultural change to build a specific digital talent; 2) technology capabilities to be developed for the cloud; and 3) adoption of agile ways of working. Approach 2: Replacement of legacy core with a new system This strategy involves the end-to-end replacement of the existing core banking system with modern banking platforms. Business drivers include expansion of digital banking offerings, increase in customer acquisition across new geographies/ demographics, and a reduction in legacy IT cost and maintenance risks. However, this approach poses a hazard for banks, as it exposes them to high investments and a long-drawn deployment cycle. It also necessitates an organization-wide commitment and a structured approach to manage the complexity involved in migration to a new core banking system. Approach 3: Gradual and progressive transformation In this approach, banks need to engage with a new vendor to adopt a new core banking system gradually and progressively. Banks benefit by moving to a best-of-breed application based on new technology - in a phased manner. However, this approach also comprises lengthy deployment cycles, which can last for years and often involve high costs associated with the layers of core banking systems that run in parallel. Approach 4: Extension of the core by building microservices This approach involves banks extending the core by building a microservices layer, closely linked to existing core systems. Business drivers include a responsive architecture to build business agility and support innovation, such as open banking. However, decoupling of existing functionality can be a challenge; hence, identification of the 'right' use case is important. Other risk factors include dependence on partner systems/other core banking features that may not be identified completely when moving some features to the microservices layer. Additionally, assembling the right talent can prove to be difficult. What Lies Ahead In practice, the right core modernization approach will vary for each bank depending on its long-term business goals and will most likely comprise a combination of the approaches listed above. For example, core modernization may involve replacement of the aging legacy core with a cloud-driven core, but the implementation may be incremental and broken down into multiple MVP phases, each focused on specific, well-defined offerings. This will allow a faster time-to-market with respect to offerings, while limiting transition risks and reducing overall cost. Moreover, along the course of replacing the legacy core with cloud core technology, coexistence architecture will need to

be designed and deployed to allow the old to interact with the new, until a full transformation to the new cloud Core platform is achieved. This may involve data sharing, API and microservices wrapper development for legacy core components, and seamless integration with both Fintech and legacy banking peripheral systems. Legacy banks are undertaking many transformation initiatives to align themselves with the changing market paradigm and customer demand. Cloud-based core modernization is critical to help banks transmute into the digital institutions of the future. This includes having an effective cloud implementation strategy, over half of financial firms in the US also roll out change management strategies and create governance policies, implementation plans and appoint a cloud leader to drive deployment, and put ROI measurements and tracking systems in place. Learn more about Wipro, Wipro Core Processing Transformation and Wipro FullStride Cloud Services by getting in touch with us. Interested in more? Check out our other articles: Hyper-personalization: Customer engagement and the future of financial services. Modernizing the core banking system: Enabling the future References: Industry: Oded Shoshany Partner at Wipro Consulting and a Leader in the Core Banking Transformation Practice Oded is an industry veteran with over 20 years of experience in core banking design and implementation, core platform modernization, online banking, mobile banking, digital payments, and digital automation technology innovation. An industry thought leader and keynote speaker, he specializes in envisioning and developing cutting-edge banking digital transformation channels and pioneering the modernization of legacy Supported by: Shri Dhar, Senior core banking platforms to the cloud. Manager - Wipro Insights India's payment journey has changed significantly over time. What started as a barter system has evolved into cashless payments Migrating your data and services to a public cloud service like Google Cloud offers multiple advantages, including increased flexibility and agility.... Traditional banks are reinventing themselves to meet rapidly Arcticle source ----- https://www.wipro.com/blogs/mikael-gotlib/ ----- Contact Wipro Blogs By Author Sprinting towards a more sustainable future Please fill the required details to access the content Mikael Gotlib Mikael Gotlib Mikael is a Digital Product Specialist with a mixed design and engineering background. He's spent the last 17 years working in digital consultancies and agencies, focusing on large-scale, end-to-end digital transformational programs from strategy and design through technical delivery. Before joining Wipro, Mikael was Head of Delivery at AKQA, where he led the product and program management team. Mikael has worked for the likes of Deloitte Digital and Accenture Interactive, among others. The challenge was to take a fresh look at matters ranging from making Sydney Harbor swimmable to amplifying the voices of Aboriginal peoples,

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### Sprinting towards a more sustainable future

----- Arcticle source ----- https://www.wipro.com/blogs/mikael-gotlib/sprintingtowards-a-more-sustainable-future/ ---- About the Authors Contact Wipro Related Blogs Transforming Water Data for the Future 3 Ways AI Will Improve Utility Customers' Experiences How Utilities Can Implement an Intelligent Customer Management Transformation Strategy Please fill the required details to access the content Sprinting towards a more sustainable future I had the pleasure of participating in Sydney Water's inaugural Innovation Festival held between October 19 and October 21. The event brought together strategic partners, industry thought-leaders, and key stakeholders from Sydney Water, as well as numerous interested participants. The challenge was to take a fresh look at matters ranging from making Sydney Harbor swimmable to amplifying the voices of Aboriginal peoples. Wipro's role was to power the innovation sprints. Our weapon of choice for innovation was the tried and tested Google Design Sprint. A design sprint is a week-long co-creation extravaganza that helps to answer critical business questions through rapid ideation, prototyping, and testing with customers. My role in all of this was to facilitate the sprint and keep the team on track for the next five days. A design sprint normally involves your team huddled together in a room, collaborating closely, but given how unsocial 2021 has been so far, we had to adapt the format to work virtually. I've done my fair share of workshops over the years, but this was the first time I've run a fully virtual design sprint with a group that had never worked with each other before. It was challenging but extremely rewarding. And while I still prefer face-to-face, I must say that the format worked exceptionally well. We kicked off Day 1 with expert interviews and, as the week progressed, we slowly shifted our focus away from defining the problem to designing the solution. It was an intense five days, and I think it's fair to say the team pushed themselves outside of their comfort zone. At the end of each day, everyone (myself included) was exhausted. But the team kept showing up the next morning with smiles on their faces ready to do it all again! So, what did we set out to do, and did we achieve it? Let's start with the former. The challenge my team set for itself was to: Connect people with actionable insights to create value for themselves and their communities. What does that mean exactly? Our theme was focused on sustainability and Sydney Water's role in empowering people to understand the impact that they and businesses have on the environment. The end game is to encourage more sustainable behavior from individuals and businesses alike. But how, I hear you ask? That's a great question. Sydney Water has access to a wealth of data, ranging from your water usage to the water quality of your local beach. Much of this data isn't currently available to the general public so the winning service concept focused on bringing this data to life as a digital service. Here is a small taste of the features that the concept included: Did the prototype test well? The short answer is yes. The team also received lots of great insights that will allow them to further refine and pivot the service. I'm excited to see where Sydney Water takes

the concept. Hopefully, we'll see an incarnation of this idea in the market in the not-too-distant future. Until then, as my four-year-old always tells me, "Don't leave the tap on while you brush your teeth." Industry: Mikael is a Digital Product Specialist with a mixed design and engineering background. He's spent the last 17 years working in digital consultancies and agencies, focusing on large-scale, end-to-end digital transformational programs from strategy and design through technical delivery. Before joining Wipro, Mikael was Head of Delivery at AKQA, where he led the product and program management team. Mikael has worked for the likes of Deloitte Digital and Accenture Interactive, among others. This event necessitated a review of Australia's capacity Historically, the relationship between utility companies and their customers has been lacklustre. Despite the fact that access to utilities is a boon to quality of life, customers see it as a given Many utilities have grown their customer management, customer information systems (CIS) and billing capabilities around tenured platforms like SAP, Oracle or other mainframe-based platforms. As the industry navigates www.wipro.com/blogs/ajay-mulgaokar/ ---- Contact Wipro Blogs By Author The CHRO Imperative for the Hybrid Workplace How organizations should identify and cope with the challenges to cultural transformation? Please fill the required details to access the content Ajay Mulgaokar Ajay Mulgaokar General Manager & Practice Head - HR Services, Wipro Limited At Wipro, Ajay is responsible for global service delivery for HR Services. His expertise lies in leveraging HR technology & Business Operations across the Hire to Retire employee life cycle. He is closely involved in working with go-tomarket activities helping shape & define transformative solutions for prospective clients. He works closely with senior client stakeholder leaders to define business objectives and to ensure seamless execution. Ajay is closely involved in talent management within the Wipro HR Services group, where he structures initiatives to ensure continuous skill development of colleagues, enabling them to enhance their relevant skill set as well as serve clients well. Ajay holds a Masters degree in Science from the Institute of Science, Mumbai. Prior to Wipro, he has worked with Alight Solutions for 15 years in the HR Services domain. Ajay is fond of reading and an avid sports enthusiast. He loves to travel in his free time. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just

# How organizations should identify and cope with the challenges to cultural transformation?

neglected culture. ===============

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Super Funds Can Elevate Member Experience The CHRO Imperative for the Hybrid Workplace Content Moderation: Keeping the internet safe using technology and human expertise Please fill the required details to access the content How organizations should identify and cope with the challenges to cultural transformation? November | 2021 A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just neglected culture. However, business leaders are a long way from becoming "cultural leaders." Cultural barriers often trump change initiatives. Corporate culture implies what employees experience as they navigate their workplace challenges, interact with their colleagues and how transparent and open the work environment is. If employees can communicate easily, half the battle is won. Most organizations struggle with this. However, we can change it by prioritizing employee experience across touchpoints and making the work environment conducive to thinking, managing and delivering outcomes with ease. Activities such as managing benefits and compensation, maintaining time-records, enabling meaningful intra-departmental and cross-functional interactions, offering planned career progressions and ensuring a sharp focus on productivity, can help lower barriers to cultural change. Managing a diverse and distributed workforce comprising full-time, part-time, contractual employees and gig workers is also becoming a challenge. In my opinion, achieving a cohesive policy can make cultural transformation easier. The role of technology and IT infrastructure is being widely accepted in addressing these challenges. By integrating data from multiple HR functions and using collaboration tools, organizations can succeed in maintaining an adaptive corporate culture. Here's how: Establishing the new "virtual" rules of collaboration and communication There is a risk in the hybrid workplace model. It could spawn a two-tier system where remote workers acquire second-class status. To avoid this, it is imperative that organizations create seamless and healthy interactions between those who work from office and those who don't. No group should have more privileges than the other (such as the ability to interact with senior management). Collaboration platforms and knowledge tools must create deeper connections, personal growth, mental and physical well-being and shared purpose. The role of cognitive automation, robotic process automation, and artificial intelligence (AI) cannot be emphasized enough in turning HR into a more collaborative, cross-functional, and agile function. With new employees, it is imperative to replace face-to-face interactions (that helped foster organizational culture) with multiple planned virtual touchpoints between new employees and the management. Suitable applications for each functional area of HR can also be deployed. The prevalent trend is to choose global platforms that provide a unified HR experience. This results in employees bonding with the organization despite working from home. Reimagining best practices for virtual onboarding, leveraging technology HR leaders have lately been asking how they can build a high-performance culture when new hires are onboarded virtually and located remotely. This can be managed with a twopronged strategy: An understanding of the backgrounds of new team members goes a long way in helping them settle into the new system. If they are unaccustomed to remote work, giving them breaks and encouraging candid chats with colleagues helps settle them in faster. Managing a multigenerational, dispersed workforce virtually Developing and preserving the culture of an organization is a senior management responsibility, not an HR

prerogative. Organizational leaders must understand that today's multigenerational workforce brings new attitudes to work. Therefore, they must lead and encourage the use of new methods and technologies to manage this talent, with special emphasis on continuous learning as the key to business survival. Digital learning, powered by learning accelerators and multigenerational and multi-modal content, with simulated environments, has become a sophisticated science. In addition, it is imperative to design individual development plans based on the needs and roles of every employee. Advanced technologies such as AI and machine learning have the capabilities to provide personalized learning experiences, and effective ondemand byte-sized learning modules. These enable workers to target more strategic assignments and allow HR leaders to manage complex employee lifecycles. The future ahead: A human-centric approach to resilient and robust corporate culture Leaders need to reflect on the changing shape of the workforce and its needs. They must act with urgency, to ensure that their workforce, whether in the office or remote remains engaged. They need to encourage employees to challenge existing processes and assumptions, discarding those that have become irrelevant. They need to experiment with new ideas and turn them into habits. This also reiterates that HR and business leaders must take sincere interest in leveraging technology to build an agile and resilient culture. It is time to take bold action, aligned with the environment of a remote workforce, to preserve the culture -and purpose—of the organization. Industry: Ajay Mulgaokar General Manager & Practice Head - HR Services, Wipro Limited At Wipro, Ajay is responsible for global service delivery for HR Services. His expertise lies in leveraging HR technology & Business Operations across the Hire to Retire employee life cycle. He is closely involved in working with go-tomarket activities helping shape & define transformative solutions for prospective clients. He works closely with senior client stakeholder leaders to define business objectives and to ensure seamless execution. Ajay is closely involved in talent management within the Wipro HR Services group, where he structures initiatives to ensure continuous skill development of colleagues, enabling them to enhance their relevant skill set as well as serve clients well. Ajay holds a Masters degree in Science from the Institute of Science, Mumbai. Prior to Wipro, he has worked with Alight Solutions for 15 years in the HR Services domain. Ajay is fond of reading and an avid sports enthusiast. He loves to travel in his free time. Despite the long-standing history of private pension plans, superannuation was introduced to Australians over 20 years ago to help them support their retirement in a financially viable way. Fast forward to 2020; it is now a A\$3T business. Over the last two decades, superannuation has become complex, highly regulated, and vulnerable to scandals. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... Content is King. Never has this been truer than now, an age ================

## The CHRO Imperative for the Hybrid Workplace

----- Arcticle source ----- https://www.wipro.com/blogs/ajay-mulgaokar/thechro-imperative-for-the-hybrid-workplace/ ---- About the Author Contact Wipro Please fill the required details to access the content The CHRO Imperative for the Hybrid Workplace March | 2023 While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. Instead, with many employees less habituated to the physical office, businesses are paying increasing attention to hybrid work models, combining elements of the traditional workplace and remote work. In fact, a Gallup survey in 2022 gave strong indications that a hybrid work schedule will be the predominant arrangement for many occupations going forward. Among "remote-capable" employees whose work can be done at home, about 53% anticipated a hybrid arrangement, while 24% predicted that they'd be working exclusively remotely. As hybrid work gains greater adoption, leaders must make sure that offices of the future accommodate the changing needs of employees working from home as well as the office. What are the biggest challenges ahead, and how can they be solved? The Challenges for the Hybrid Office of the Future Challenges for the hybrid office of the future include easing worker stress, keeping employees onboard, promoting career advancement, and providing a secure and smoothly functioning online work environment for employees both at home and in the office. Embracing the Hybrid Office of the Future No two hybrid workplaces will be alike. Businesses, though, can choose from an increasing range of technology solutions to help them face the specific challenges facing their organizations. 1. Harness chatbots for smarter hiring and faster response to employees It's only common sense that employees who succeed in their jobs experience greater satisfaction. Businesses can widen their talent pools for a greater choice of job candidates through the use of recruitment chatbots. Chatbots have been shown to substantially lower candidate abandon rates. By answering questions from candidates, the bots free up time for HR pros to focus on the strategic areas of their jobs. After workers are already onboard, leaders can also leverage chatbot technology to meet employee needs quickly, responding to their queries immediately. The bots can be configured to autoresolve issues around HR benefits or tax documents, for example. Chatbots can chime in anytime and anywhere — whether the worker is at home or in the office — directly within Microsoft Teams or Slack. 2. Streamline IT support Lack of adequate IT support can be another stressor, especially in environments where team members spend much of their time collaborating online. The addition of AI-enabled helpdesk capabilities can amplify the benefits of traditional automation with what's called intelligent automation. For instance, businesses can add additional smarts to automation by integrating historical data. Use of predictive analytics can help address technical issues before they impact businesses processes and outcomes. To deliver greater convenience to employees, businesses can use new technology to smoothly integrate easy-to-use and personalized AI-enabled IT

self-service into collaboration platforms like Slack. 3. Build employee skillsets through LXPs Employer-sponsored learning opportunities can help keep workers from exiting a company for other pastures. These days, trainers deliver eLearning through a variety of specially designed technologies that provide highly personalized learning. The capabilities of those environments, combined with the unique types of experiences delivered to the learner, create learning experience platforms (LXPs). Today, LXPs are a growing part of the learning ecosystem. The "openness" of LXP architecture means their advantages can be leveraged by a much broader audience than before through integration with countless corporate and third-party tools. 4. Offer online platforms for wellness Taking a holistic approach to employee well-being and embedding it into the fabric of the company can't help to make it clear that the employer cares. With the rise of the hybrid workplace, it's especially important for resources to be available online. Technology is now available for providing 24x7 professional mental health counselors and wellness coaches — along with a host of legal, financial, and dietitian resources — all in a single platform. Taking the next step In hybrid workplaces of the future, leaders must ensure employee wellbeing in both office and remote environments. This means leveraging new technology to achieve greater intelligence, personalization, and ease of use across job hiring platforms, employee self-service options, employee careerbuilding tools, and much more. Industry: Ajay Mulgaokar General Manager & Practice Head - HR Services, Wipro Limited At Wipro, Ajay is responsible for global service delivery for HR Services. His expertise lies in leveraging HR technology & Business Operations across the Hire to Retire employee life cycle. He is closely involved in working with go-to-market activities helping shape & define transformative solutions for prospective clients. He works closely with senior client stakeholder leaders to define business objectives and to ensure seamless execution. Ajav is closely involved in talent management within the Wipro HR Services group, where he structures initiatives to ensure continuous skill development of colleagues, enabling them to enhance their relevant skill set as well as serve clients well. Ajay holds a master's degree in science from the Institute of Science, Mumbai. Prior to Wipro, he has worked with Alight Solutions for 15 years in the HR Services domain. Ajay is fond of reading and an avid sports enthusiast. He loves to travel in his free time.

www.wipro.com/blogs/dennis-joshua/ ---- Contact Wipro Blogs By Author Cybersecurity through collaboration Please fill the required details to access the content Dennis Joshua Dennis Joshua Global Head of Cyber Defense & CISO-Americas, Wipro As the Global Head of Cyber Defense & CISO-Americas at Wipro, Dennis leads the Cyber Threat operations for Wipro and its entities globally. In his current role, he is responsible for managing the threat detection and incident response function for which he setup the first nearshore Cyber Defense Center for Wipro in the Americas region. Dennis is a highly customer-focused and performance-driven professional skilled in Threat Management, Security Analytics, Advanced Hunting, Threat Intelligence, Incident Response, and Digital forensics. He has a strong background in designing, building and leading advanced threat management solutions, and has managed several complex cyber incident investigations across industries. He has extensive technical background in Cybersecurity, and is a GPEN, GDAT, GCFA, C|EH, C|HFI, and ITIL certified professional.

### Cybersecurity through collaboration

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drivers. The result? Faster, on-demand scaling and optimized cost by zero spend on maintenance. Collaborating for a safer tomorrow: Empowering users and businesses to make informed decisions regarding securing their data and systems is the key to building a collaborative architecture that focuses on governance instead of control. Instead of letting security professionals burn out micro-managing controls, we must allow businesses and users to be responsible and let them weigh in on opportunities vs. risk when figuring out how to keep their systems and data secure. This promotes collaboration and allows us to scale faster in securing information while still optimizing our costs. Dr. Martin Luther King create a profound impact by mobilizing people to become activists? He could successfully create a culture of openness and trust that made people want to be a part of something more significant and more meaningful than themselves. Change agents through the centuries have been those who have inspired individuals to come together for the common good. An open culture of cybersecurity requires us to instill a similar mission: security is everyone's responsibility. It is part of a bigger objective that demands continuous collective teamwork between businesses and security professionals. Like siloed systems, we, as individuals, can be slow in diagnosing and responding to threats, but with collaboration, we can work together and take collective action to stay protected. In 2018, when Gary Brantley took his job as Atlanta's Chief Information Officer, the city was still reeling under the shock of one of the most high-profile ransomware cyberattacks which had hit over a third of their applications. This threat created a renewed focus on building a security framework through an open culture and a web of collaboration between state, city, and federal cybersecurity officials. The proof of the success of this effort was the subsequent Super Bowl event, which was one of the most extensive cybersecurity operations at a Super Bowl to date. In the realm of cybersecurity, creating a consistent culture of sharing both our success and pitfalls helps build trust and resilience in our ability to keep their data secure. Research Wipro undertook for the The State of Cybersecurity Report 2020 showed that 60% of organizations participate in sectoral simulation exercises and 57% are willing to share Indicators of Compromise with their peers. These are great steps towards a more collaborative and secure world, and getting it closer to 100% would be a meaningful goal for all of us. Industry: Dennis Joshua Global Head of Cyber Defense & CISO-Americas, Wipro As the Global Head of Cyber Defense & CISO-Americas at Wipro, Dennis leads the Cyber Threat operations for Wipro and its entities globally. In his current role, he is responsible for managing the threat detection and incident response function for which he setup the first nearshore Cyber Defense Center for Wipro in the Americas region. Dennis is a highly customer-focused and performance-driven professional skilled in Threat Management, Security Analytics, Advanced Hunting, Threat Intelligence, Incident Response, and Digital forensics. He has a strong background in designing, building and leading advanced threat management solutions, and has managed several complex cyber incident investigations across industries. He has extensive technical background in Cybersecurity, and is a GPEN, GDAT, GCFA, C|EH, C|HFI, and ITIL certified professional. Dennis currently resides in Dallas with his family and is a member of both local and national cyber security associations. A tidal wave of ESG regulations is looming across markets. To prepare, companies are shifting responsibility for sustainability management and reporting to the

risk management domain. Risk executives are investing in enhancing their governance, risk management, and compliance (GRC) systems to account for ESG factors. The ability to exchange cyber threat intelligence (CTI) in privacy preserving and in a secure manner is vital for enterprises to manage their security risks effectively. The cybersecurity industry was deeply shaken by the Solorigate attack, the impact of which is still being felt in the cybersecurity space. Several companies have already started addressing this Arcticle source ---- https://www.wipro.com/blogs/anchal-sardana/ -----Contact Wipro Blogs By Author Strategic Partnerships Will Drive 5G Success for Communications Service Providers AI Driving 5G Innovations for Communications Service Providers Please fill the required details to access the content Anchal Sardana Anchal Sardana Practice Head, CSP and NEP Presales, Wipro Limited Anchal heads Wipro's business development activities for CSPs and NEPs. She works closely with the practice team to drive innovative 5G solutions for customers in North America. CSPs are looking to the enterprise (business-to-business) segment to help monetize their investments in 5G. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing

## Strategic Partnerships Will Drive 5G Success for Communications Service Providers

---- Arcticle source ---- https://www.wipro.com/blogs/anchal-sardana/ strategic-partnerships-will-drive-5g-success-for-communications-serviceproviders/ ---- About the Authors Contact Wipro Related Blogs Connectivity and Interoperability: Realizing the Full Potential of Comprehensive IoT Solutions Using IoT to Create an Intelligent Enterprise The New Era of Autonomous Systems Please fill the required details to access the content Strategic Partnerships Will Drive 5G Success for Communications Service Providers January | 2023 The shift to ubiquitous connectivity has pushed traditional communication service providers (CSPs) to invest in 5G infrastructure, spectrum and networks. And it has compelled cable service providers to find ways to leverage their new spectrum rights. So far, this move has driven innovation for consumers. On-demand viewing with overthe-top (OTT) players has disrupted the space and begun cannibalizing traditional services, impacting the voice and data value chain. CSPs are looking to the enterprise (business-to-business) segment to help monetize their investments in 5G. And with connected enterprise and industry communication gaining momentum, this focus is a smart move. The enterprise or B2B segment is looking to monetize its asset data to drive greater efficiencies, improve the customer experience and augment its revenue-generation capabilities. Connectivity will be the key driver for this transformation. And CSPs are well-placed to assist enterprises in their digital transformation journey. Collaborating with partners will drive

innovative solutions that target the enterprise segment. Partner Ecosystem Benefits 5G will redefine how the enterprise landscape operates and is one of the biggest enablers of an interconnected, digital world. An enterprise 5G journey is challenging to build but presents a unique set of opportunities. Enterprises should consider working with a CSP with a robust partner ecosystem to benefit from a connected digital environment. With diverse partners, CSPs can leverage features they would not otherwise be able to navigate alone: data mining, device connectivity, old-device customization, new-device support, spectrum management, infrastructure development, and many more. Establishing a broad partner network makes it easier for CSPs to overcome the challenges in their path toward 5G monetization. With strategic collaborators, CSPs can tap into: Turning 5G Enterprise Challenges into Opportunities Enterprise solutions can open new markets and new revenue streams. This uncharted territory brings a unique set of challenges, but within those challenges lies opportunity. 5G networks are faster, have expanded capabilities and enable efficient intranets that connect more devices. However, existing enterprise devices need transformation to "speak" the new 5G language. This transformation is central for enterprises to take advantage of the expanded network - an important area where a trusted partner can add tremendous value. For example, a system integration partner can connect existing wired devices to the 5G backbone to monitor cables and reduce equipment downtime caused by damage and failures. CSPs should develop partner ecosystems that can deliver complete, next-generation enterprise solutions. Look for partners with core engineering in their DNA, connectivity expertise, vertical domain expertise, skill at navigating Industry 4.0 frameworks, and a history of solving enterprise business problems. These skills and more are required for CSPs to truly deliver the 5G-enabled solutions that will drive their next wave of growth. Industry: Anchal Sardana Practice Head, CSP and NEP Presales, Wipro Limited Anchal heads Wipro's business development activities for CSPs and NEPs. She works closely with the practice team to drive innovative 5G solutions for customers in North America. Balakrishnan K Global Practice Head, 5G Enterprise, Wipro Limited Bala is a Global Leader and heads the Enterprise connectivity sub-practice at Wipro Engineering. He focuses on enabling enterprise clients across numerous industries to advance their OT strategy and digital-transformation journey through 5G and edge computing. To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. As management guru Peter Drucker once said, "What gets measured, gets managed." Ever since the first programming language was written, software technology has played a crucial role in transforming the efficiency of machines, processes, and people. Today, as software technology drives drastic improvements in outcomes and operations, we are on the cusp of a 

### AI Driving 5G Innovations for Communications Service Providers

----- Arcticle source ----- https://www.wipro.com/blogs/anchal-sardana/aidriving-5g-innovations-for-communications-service-providers/ ---- About the Author Contact Wipro Related Blogs Making ML Models in Banking Resilient using Adversarial Attacks Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? AI Helps Insurance Companies Make Smarter Decisions Please fill the required details to access the content AI Driving 5G Innovations for Communications Service Providers February | 2024 The telecommunications industry is on the brink of a transformative era fueled by exponential growth in mobile data traffic. To navigate this data deluge successfully, it's imperative to integrate artificial intelligence. With the rollout of 5G and the anticipation of 6G technology, AI is set to revolutionize telecommunications. Telcos must grasp the gamechanging synergies between connectivity and AI. Artificial intelligence will fundamentally reshape industry dynamics and also unlock new horizons of possibility for the enterprises that leverage it to its fullest. How to Leverage the power of AI in 5G Networks The advent of 5G has introduced a complex network landscape. This network landscape now encompasses millions of interconnected devices. It offers low-latency data transfer along with new capabilities such as network slicing, connected intelligent edge solutions, cognitive networks, ORAN, vRAN, and private networks. As communications service providers (CSPs) transition away from traditional 4G processes to incorporate these new and innovative capabilities, advanced analytics platforms powered by AI are becoming indispensable. CSPs can leverage the power of AI to supercharge their 5G networks across several dimensions: Unlocking the Next Frontier As we enter the 6G era, AI will be the driving force behind numerous connectivity-driven industry transformations. The convergence of the physical and digital worlds is fast approaching. AI-native networks will push industries towards smarter and more efficient operations. In the context of manufacturing, for example, telecoms will play a vital role in enabling an entire landscape of "factory of the future" capabilities. By embracing AI-driven decision-making and leveraging the anticipated advancements in 6G, CSPs can prepare for the increasing demands of customers, explore new business opportunities, enhance their sustainability efforts, and position themselves as industry leaders. Working alongside trusted engineering partners with deep AI capabilities will pave the way forward. The resulting AI strategies will enable CSPs to transform their networks, solidify the 5G revolution, and advance toward the 6G horizon. Industry: Aanchal Sardana Global Presales Head, 5G & Edge Connectivity, Wipro Engineering Edge Anchal heads Wipro's business development activities for CSPs and NEPs. She works closely with the practice team to drive innovative 5G solutions for customers in North America. Machine learning is a widely used tool that assists in decisionmaking and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any

organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Financial Services is one of the most challenging industries from a source ---- https://www.wipro.com/blogs/vipul-kumar-gupta/ ---- Contact Wipro Blogs By Author How Utilities Can Implement an Intelligent Customer Management Transformation Strategy Please fill the required details to access the content Vipul Kumar Gupta Vipul Kumar Gupta Consulting Partner, Utilities, Wipro Limited Vipul is a consulting partner in the utility sector with 24 years of experience in IT. He is part of Wipro's Domain and Consulting practice, specializing in domain-centric utility solutions. Vipul is a thought leader in the customer experience and billing areas, helping global utility companies optimize their current customer and billing platforms. Many utilities have grown their customer management, customer information systems (CIS) and billing capabilities around tenured platforms like SAP, Oracle or other mainframe-based platforms. As the industry 

# How Utilities Can Implement an Intelligent Customer Management Transformation Strategy

----- Arcticle source ----- https://www.wipro.com/blogs/vipul-kumar-gupta/howutilities-can-implement-an-intelligent-customer-management-transformationstrategy/ ---- About the Author Contact Wipro Related Blogs Transforming Water Data for the Future 3 Ways AI Will Improve Utility Customers' Experiences Changing the Future of Australia's Utility Sector through Data and AI Please fill the required details to access the content How Utilities Can Implement an Intelligent Customer Management Transformation Strategy Many utilities have grown their customer management, customer information systems (CIS) and billing capabilities around tenured platforms like SAP, Oracle or other mainframe-based platforms. As the industry navigates new challenges such as the cost to acquire and serve customers, customer experience issues, and the requirements of a low-carbon economy, the pace of change has forced utility companies to upgrade their capabilities and make customer management systems more intelligent. Their old platforms simply aren't able to accommodate current market demands. Large providers like SAP, Oracle and others have introduced a variety of new industry cloud solutions to meet utilities' need for better returns from existing investments, to avoid the risks involved in system transitions, and to accommodate their comfort with existing platform stacks. But how should utilities explore these strategies when planning their digital and business transformation? Three Ways to Approach Intelligent Transformation Utility companies can meet market demands by adopting one of three distinct approaches to make their customer systems more intelligent. Business performance acceleration solutions address the typical challenges in specific areas affecting business performance, areas like late/incorrect bills, high volume of billing exceptions, and cumbersome user journeys. Heritage-led

transformation solutions help clients develop new capabilities without replacing their existing billing/CIS solutions by deploying micro-services/ API-based architecture solutions to integrate new capabilities. Total platform transformation includes deploying systems for the future by embracing the best of digital tech including AI/ML, automation, and the cloud economy. Cloud solutions from firms like SAP and Oracle are advantageous for utilities that have made significant investments in these legacy platforms. These cloud-enabled solutions target companies looking to deploy new customer management and billing solutions but prefer established market solutions for reasons including risk mitigation, customization, and the size of their customer base. Meeting Market Demands with New Capabilities These new market solutions are embedded with many new capabilities. Typically, vendors such as SAP and Oracle target four important new trends to help utilities meet current market demands. These pre-built solutions shorten the time to rollout and reduce custom code footprint on billing and CRM systems. They also make the existing system easy to upgrade. Pre-built solutions connect silos and deliver seamless customer experiences across channels without cannibalization. With capabilities such as Customer 360 or customer data platforms, these solutions pass customer context data across channels and enable features like intelligent call routing. Insights help companies provide better customer experiences and identify new opportunities. Using the power of AI, personalization is possible through experience orchestrators with predictive insights, optimization algorithms and advanced information presentation capabilities. These insights can be deployed across channels. Automation can serve various customer segments (personas) through a variety of channels. For example, automation can address many standard interactions like handling product inquiries. AI can quickly identify interactions that require empathy or persuasion and automatically route Strategy to Transform Customer those gueries to an agent. Management Taking an iterative approach can help utilities grow their future customer management capabilities without sacrificing their investments in tenured platforms. This strategy allows utility companies to deliver business value faster while providing time to adapt to new workflows and adopt new capabilities as needed. This approach can be conceived as a four-step journey. Start by addressing any significant stability and business performance issues with the existing suite of applications. Employ utility best-practice playbooks and other solutions like AI-based exception management. It is important to ensure that business KPIs like late bills, unbilled revenue, data inconsistency and business exceptions are reduced. This will significantly improve business value and customer satisfaction. Consider robotic process automation (RPA) and intelligent solutions to enhance the customer service agent's experience without major changes to the core system. Next, update existing customer systems to systems of experience and engagement through microservices/APIs. Microservices are a great way to quickly add new functionality without rebuilding existing systems. Use intuitive UI and analytics-driven interactions as an incremental layer on existing solutions to add personalized customer experiences. By using industry cloud solutions incrementally, core customer information systems are eventually migrated to the cloud. Cloud journey roadmaps and utility templates groomed through best practices can significantly mitigate program risks and accelerate the deployment. Utilities maturity journey and

Wipro offerings Figure: Four steps to customer management transformation Many large utility organizations have invested both time and money in legacy mainframe platforms but now find the need to modernize their capabilities. The good news is these platforms are answering the need by addressing new market demands in their roadmaps with solutions that are easy to add like microservices. Transforming customer management on legacy systems doesn't have to be overwhelming or require adding new vendors. Following an iterative approach allows utility companies to gradually meet the demands of the market by adding new capabilities to their existing systems without compromising time to market, risking core system functionality or disrupting their existing customer base. Industry: Vipul Kumar Gupta Consulting Partner, Utilities, Wipro Limited Vipul is a consulting partner in the utility sector with 24 years of experience in IT. He is part of Wipro's Domain and Consulting practice, specializing in domaincentric utility solutions. Vipul is a thought leader in the customer experience and billing areas, helping global utility companies optimize their current customer and billing platforms. This event necessitated a review of Australia's capacity Historically, the relationship between utility companies and their customers has been lacklustre. Despite the fact that access to utilities is a boon to quality of life, customers see it as a given Utilities can now rapidly solve previously intractable problems

## How Quality Assurance is Adapting to New Paradigms

---- Arcticle source ---- https://www.wipro.com/blogs/romil-chennupati/how-quality-assurance-is-adapting-to-new-paradigms/ ---- About the Authors Contact Wipro Please fill the required details to access the content How Quality Assurance is Adapting to New Paradigms January | 2022 The Quality Assurance (QA) industry is susceptible to technology disruptions that impact the system being tested. Additional change agents include new development methodologies (e.g. agile and DevOps), the advent of microservices, open-source tooling, persona-based testing and more. During the past decade, these and other innovations have impacted QA evolution, and they may define how the industry will shape up during the next decade. What are the major QA trends to watch? Changing QA Ways of Working Agile as a software development methodology was devised in 2001, but it was only in

the early part of the past decade that there was a change in mindset toward QA. Specifically, how it needs to evolve into quality engineering to support the agility required to respond to market changes. Several themes are developing in how companies address QA. Wipro's recent QA report, "Quality Engineering in a Cloud-Centric World," found that most organizations claim to have adopted agile. The reality is, close to 50% of development programs continue to be a rendition of waterfall, iterative or hybrid methodologies. This is due to the complexity associated with architecture or even business involvement in IT programs. This has a significant impact on the way service consumption or delivery models for enterprise testing are designed today. While organizations try to adopt the classic "tribe-squad" model evangelized by Spotify, they invariably see a need to create squads focused on end-to-end testing to handle complexities associated with back-office and monolithic applications. The service delivery and consumption models tend to follow concepts evangelized for other technologies. For example, the center for enablement model, evangelized by MuleSoft for platform enablement, became an approach that organizations could easily adopt and implement. This model is used to define enterprise test operations and governance models. The success of this model has resulted in its use by a mature agile organization to overhaul its test center of excellence into a test center for enablement. One area where the QA industry matured beyond others was the adoption of crowd models. There has been a surge in platforms providing QA on crowds across the globe, either by partnering with crowds or by providing a test crowd. While public crowd adoption continues to be a focal point, the utilization of private or internal crowd has become popular and will likely grow in this era of "the great reshuffle." Behavior-driven development and acceptance-driven development gained increased acceptance as they are designed for deep integration and the ability to define test scenarios using the gherkins construct with mainstream automation solutions. Cloud adoption had a major impact on ways of working, requiring a move to a microservice architecture. Operations started looking at new paradigms like site reliability engineering and observability. Traditional testers had to evolve to test the cloud-based apps differently with a "shift-right" mindset. The aversion to testing in production started to wane, while techniques like chaos engineering gained traction. The New Age of QA Tools QA tooling has undergone major innovation, with the use of AI in testing now starting to change. Multiple meaningful use cases were explored, but scalability and self-healing test automation were the most popular concepts. This was influenced by two factors. The first is the increase in the adoption of agile and DevOps. This popular methodology led to more changes in apps or products, which ultimately impacted the existing automation. The dynamic nature of screens, like Salesforce's lightning UI, led to a need for more flexible and reusable automation solutions. While there were products from tool vendors in this space, a lot of innovation has come from global service providers with intelligent solutions such as Wipro Intelliassure. These AIbased solutions have increased in number, but they can't displace traditional automation, because they support legacy technologies. Interestingly, toward the end of the previous decade, these solutions started introducing AI and redefining solutions. The second influencing factor is the rise of open-source contributions. In 2011, the industry saw a surge in financial contributions to the Selenium project, which drove several open-source automation solutions.

Over time, new open-source projects have gained traction as newer frameworks like App Action, especially for JavaScript developers, require a different solution. Cypress and Puppeteer are among the many open-source solutions that have gained traction. What Does the Future Hold for QA? Innovations in the use of AI, the enhancement to platform capabilities via acquisition, and integrated toolchains can be expected to continue evolving QA during the next decade. Based on the pace of change in both the business and technology worlds, expect a much more accelerated pace in QA innovation as well. The sheer number of patents filed in the QA domain, the active open-source community, the investments in startups, and mergers and acquisitions during the past few years indicate that the industry will continue to evolve rapidly. Additionally, with more QA communities and chapters guided by pioneers and influencers across the globe, engineering talent will also evolve. The new cloud paradigm is growing rapidly, and so is the need for quality engineering. In the next decade, a true businessaligned, quality-driven development approach will be the new focus. To understand how organizations are successfully implementing QE strategies for a cloud-native environment, please read Wipro's Quality Engineering in a Cloud-Centric World report. Romil Chennupati Principal Consultant, Quality Engineering and Test Advisory Services, Wipro Limited Romil works extensively with clients to define and overhaul quality-engineering journeys for cloud adoption. His key areas of strength include Quality Engineering for Cloud-Native applications and next-gen technologies like Blockchain and Bots. Aditya Hosangadi Lead Consultant, Intelligent Quality Ecosystem, Wipro Limited Aditya is a lead consultant for Wipro's Intelligent Quality Ecosystem, a part of the Application Engineering and Modernization group. He works collaboratively with clients embarking on their digital transformation journey, to blueprint their multiyear quality engineering transformation strategies using AI-based solutions. His key areas of strength include the use of disruptive technologies revolving around AI and the user experience in the sphere of application quality.

==========================------ Arcticle source ----- https:// www.wipro.com/blogs/arnav-bal/ ----- Contact Wipro Blogs By Author The Pivot to Cloud Demands a Shift in Quality Engineering and Assurance Please fill the required details to access the content Arnav Bal Arnav Bal Senior Consultant, Modernization, Cloud & API Assurance, Wipro Limited Arnav works as a Consultant for SOA Testing, Service Virtualization and Cloud-Native Assurance. He currently leads Cloud-Native Assurance solutions within the practice. He is an MBA graduate with 4+ years of consulting experience across various industries. Arnav is an AWS Certified Solution Architect and Developer Associate. A cloud-native infrastructure is defined in large part by its modularity. This decoupling of the entire architecture has led to innovation and agility

## The Pivot to Cloud Demands a Shift in Quality Engineering and Assurance

----- Arcticle source ----- https://www.wipro.com/blogs/arnav-bal/the-pivot-tocloud-demands-a-shift-in-quality-engineering-and-assurance/ ---- About the Author Contact Wipro Please fill the required details to access the content The Pivot to Cloud Demands a Shift in Quality Engineering and Assurance January | 2022 A cloud-native infrastructure is defined in large part by its modularity. This decoupling of the entire architecture has led to innovation and agility, but it has also created many moving parts that must allow programmatic access and greater observability to achieve the highest quality assurance. This adds a new dimension to testing cloud-native architecture, one in which traditional quality engineering (QE) roles can no longer be compartmentalized to the development cycle. Modern quality engineers (QEs) must now work more closely with site reliability engineers (SREs) or even evolve into SREs themselves. Wipro's Quality Engineering in a Cloud-Centric World report found that 70% of organizations have a cloud strategy defined, and quality engineering and assurance form a critical part of that strategy. But cloud-native applications require a higher degree of service discovery, automation, observability, traffic management and security, and production-like test strategies must be used earlier in the software development lifecycle (SDLC) to reduce defects. This has caused a paradigm shift for quality engineering. To succeed, today's cloud-enabled QE must become proficient in test automation and be able to understand monitoring, observability, microservice patterns and architectural principles. Three Principles for Cloud-Native Assurance The new quality engineering paradigm must address the decoupled nature of the cloud. Testing should include verifying scalability and the capacity of the infrastructure for horizontal pod autoscaling. Organizations should also validate the system's ability to bounce back from failure and persistence in both data and state. It is also critical to test the ability to undertake risky deployments without hamstringing production, and to assure that requests and limits are configured properly to handle production or production-like traffic Some of the principles organizations need to adopt for cloud-native assurance include testing uncertainty through autonomy, shift right with QAOps and proselytizing testers to quality engineers. These tenets need to be assured along with the set of functional/regression tests traditionally performed by API testers. One of the key bottlenecks of testing in a monolithic architecture is the QE's dependence on developers and ops engineers. A cloud-native QE will need to transcend the role of an application tester and begin to test the resiliency of a cloud-native architecture, decoupling themselves from the trappings of a typical SDLC. This can be done by including autonomy in squad-building and skill set alignment ("feature toggling"). Follow the adage: To build a resilient architecture, one must first learn to break it! There are approaches such as role-based access control where testers can be given autonomy to test microservices within a

designated namespace on the cloud in specific environments without apprehension of affecting production. This enables testers to validate rolling deployments (Canary, Blue-Green, Dark Releases, etc.) along with having visibility on service mesh, CI and telemetry pods. There are good tools in the market like Prometheus, Grafana, ELK, and Kiali (on Istio) that can be used for root cause analysis for system failures/alerts. While DevOps in isolation ensures agility, it does not ensure high quality. This is because most defects in cloud-native architectures are caught in production and are ops-related. This is where QAOps can be used in tandem with DevOps. Utilize local environments to pull rolling deployments automatically. For example, using Minikube to conduct deployment tests in local environments brings "right" tests to the "left." Current test environments have failed in building test specialists by assigning specialized testing skill sets to generalized roles like functional testing or API testing. Cloud-native testers need to specialize in testing distributed systems on the cloud with two main objectives: validating the microservices applications and testing end-to-end through integration testing. This is where QAOps works in conjunction with DevOps rather than just testing at the endpoints. This requires a significant change in organizations' skilling strategies. Currently, according to Wipro's State of Quality report, 72% of an organizations' testing workforce is T-shaped engineers (one functional and one technical skill). The new structure of cloud systems requires an upgrade to more cross-functional engineers. When it comes to meeting the demands of niche cloud QE skills, our research in the same report found that 83% of organizations prefer upskilling to hiring cross-skilled QEs from the market. This benefits the organization, because engineers have a familiarity with systems and culture, and better learning opportunities lead to higher retention. Resilient Cloud Architecture Requires a Paradigm Shift in Quality Creating a truly resilient architecture on the cloud will require a shift in the way the IT testing landscape is viewed. The current delivery squads (BA-Dev-QA) and their corresponding swim-lanes have streamlined Agile/DevOps responsibilities in the service-oriented architecture era, but they must be reconfigured in the cloud-native world to deliver high-quality solutions. The first step is enabling QEs to try and break the architecture throughout the SDLC for continuous improvement, rather than perform application-level tests only during the system integration testing phase. Furthermore, re-contextualizing what testing on the left or right means will help redefine testing to create truly auto-scalable, efficient and resilient deployments in the cloud. The new cloud paradigm is evolving rapidly. So is the traditional role of quality engineering. Organizations must evolve their OE accordingly to thrive in the cloud-everywhere environment. Arnav Bal Senior Consultant, Modernization, Cloud & API Assurance, Wipro Limited Arnav works as a Consultant for SOA Testing, Service Virtualization and Cloud-Native Assurance. He currently leads Cloud-Native Assurance solutions within the practice. He is an MBA graduate with 4+ years of consulting experience across various industries. Arnav is an AWS Certified Solution Architect and ----- https://www.wipro.com/blogs/balaji-kasinathan/ ----- Contact Wipro Blogs By Author The Imperative to Focus More on Non-Functional Testing for the Cloud Please fill the required details to access the content Balaji Kasinathan Balaji Kasinathan Lead Consultant, Non-Functional Testing and Engineering, Wipro Limited Balaji leads the Test and Advisory Consulting Services (TACS)

for Non-Functional Testing and Engineering. He has 16 years of experience in different testing and engineering tools, across different platforms and domains. Balaji has a proven track record of effectively shaping, managing and growing successful businesses and technology programs, building strong teams and running large delivery engagements. He consistently delivers innovative ideas in the space of consulting, pre-sales, CoE and delivery management. Given the rapid migration to cloud-based architectures, the underlying IT that supports new ways of doing business

## The Imperative to Focus More on Non-Functional Testing for the Cloud

----- Arcticle source ----- https://www.wipro.com/blogs/balaji-kasinathan/theimperative-to-focus-more-on-non-functional-testing-for-the-cloud/ ----- About the Authors Contact Wipro Please fill the required details to access the content The Imperative to Focus More on Non-Functional Testing for the Cloud January | 2022 Given the rapid migration to cloud-based architectures, the underlying IT that supports new ways of doing business including quality engineering - needs to transform. Cloud-based platforms and solutions provide an array of benefits, from accelerated business growth and increased agility to cost reductions and run-time resource provisioning. Cloud can also deliver a superior and seamless user experience across channels. Yet the quality of that user journey is vital to improving customer acquisition and retention. It is therefore critical for businesses to test appropriately. Quality testing must take place across the user journey, not just for new system functionality. And with the increasing complexity of cloud-based user journeys, non-functional testing (all the ways a system operates) and performance testing (how well it works) need a renewed focus. Best Practices for Non-functional and Performance Testing on the Cloud Performance testing on the cloud is distinctive and differs significantly from traditional load testing in its objectives and non-functional dimensions.. While conventional simulated load tests and system monitoring must continue for legacy software (enterprise systems), the focus for cloud should be on resilience and reliability of the highly distributed (event-driven, API, microservices) platforms. Chaos engineering and gamification tests can shed light on the weakness in design-code-deployment, but testing for resilience requires checking the right levels of performance, throughput under varying workloads, and the data coming from multiple channels. Accounting for peak time loads with variable host infrastructure elements has also become mandatory to assure reliability. When planning performance testing for cloud environments, quality engineering teams should consider the following four best practices. 1. Define desired nonfunctional attributes for the user journeys in a steady state. It's also important to be aware of the difference between a steady and unsteady state. Engineering teams are normally better equipped or at least expecting failures in an unsteady state; steady-state is where a different approach is

needed. 2. Introduce reliability as a core principle for DevOps. Ensure that changes in the system are gradual. The impact should be detectable and measurable. Measure all attributes, be it related to system or engineering, to determine risks and toil and ultimately service level objectives and error budgets. 3. Testing in production is critical. Wipro's Quality Engineering in a Cloud-Centric World report found that 23% of companies found more value in shift-right activities (when compared to the shift-left approach) in cloud ecosystems for non-functional and performance attributes. Utilize chaos engineering principles to experiment in production by introducing variables that can impact the cloud, the network or the application, and observe the overall system behavior. Integrate non-functional tests and chaos tests in the continuous delivery pipeline immediately after a change is introduced in the system. 4. Deploy the right delivery model based on skill sets. Performance skill sets are still very niche, and 46% of organizations still offer it in a shared-service model. It may stay this way until more organizations advance their cloud maturity. The new cloud paradigm is evolving rapidly, and so is the need for quality engineering. No two organizations are the same. What works for one will not necessarily work for the other. However, adopting these best practices requires a certain discipline in terms of the delivery model, skill sets availability and shift left/right approach Balaji Kasinathan Lead Consultant, Non-Functional Testing and Engineering, Wipro Limited Balaji leads the Test and Advisory Consulting Services (TACS) for Non-Functional Testing and Engineering. He has 16 years of experience in different testing and engineering tools, across different platforms and domains. Balaji has a proven track record of effectively shaping, managing and growing successful businesses and technology programs, building strong teams and running large delivery engagements. He consistently delivers innovative ideas in the space of consulting, pre-sales, CoE and delivery management. Shuvashri Sarkar Performance Engineer, Non-Functional Testing and Engineering, Wipro Limited Shuvashri is a Performance Engineer specializing in shift-right initiatives and continuous testing. She works on innovation initiatives for clients in the financial services sector by experimenting and enhancing performance engineering solutions with the latest innovation in the market.

www.wipro.com/blogs/ramesh-srinivasan/ ---- Contact Wipro Blogs By Author Advanced Analytics Improve Industrial Plants' Asset Performance and Efficiency Please fill the required details to access the content Ramesh Srinivasan Ramesh Srinivasan Managing Consultant, Energy - Domain and Consulting, Wipro Limited Ramesh has 17 years of experience in downstream oil and gas. His focus has been on the implementation and integration of manufacturing enterprise system applications for refineries, petrochemicals, liquid natural gas and lubricants plants. Ramesh coauthored "MESA Process Industries Guidebook: Adopting Integrated Manufacturing Operations Management (IMOM) in Oil and Gas & Petrochemical Industries, Leveraging Digital Technologies and Industry 4.0 Framework." The chemical and oil and gas industries are facing financial, operational and market challenges due to uncertain global conditions. Some factors affecting profitability are unplanned downtime of critical assets, optimized asset performance and process efficiency improvement.

# Advanced Analytics Improve Industrial Plants' Asset Performance and Efficiency

----- Arcticle source ----- https://www.wipro.com/blogs/ramesh-srinivasan/ advanced-analytics-improve-industrial-plants-asset-performance-andefficiency/ ----- About the Author(s) Contact Wipro Related Blogs Looking into the Future of the Classic Data Historian The time is now: How artificial intelligence and 'liberated data' can help the Energy industry weather the current crisis Please fill the required details to access the content Advanced Analytics Improve Industrial Plants' Asset Performance and Efficiency May | 2023 The chemical and oil and gas industries are facing financial, operational and market challenges due to uncertain global conditions. Some factors affecting profitability are unplanned downtime of critical assets, optimized asset performance and process efficiency improvement. The performance of critical assets plays an important role in a plant's efficiency, revenue, profitability and ROI. As a result, plants have a critical need for advanced predictability about unusual asset behavior. Real-time data management systems act as data historians or processors of data from various sources, including industrial Internet of things (IIoT) connected assets. The dramatic increase in additional data points has added stress to data-processing systems, even as most companies continue to rely on manual tools to monitor and analyze performance. A modern, automated approach to analyze these data sets can make data processing, and industrial plants, considerably more effective. Data Models Can Predict Asset Failure Many of the challenges industries face result from plants using conventional methods and systems to drive asset performance and reliability. Plant data that has been analyzed manually cannot proactively address asset breakdowns or plant shutdowns, nor can it provide adequate time for plant managers to prepare for and/or mitigate the issues. By comparison, predictive maintenance using machine learning (ML) and artificial intelligence (AI) can provide a more-precise approach to reduce unplanned downtime, decrease maintenance costs and reduce EH&S risks. Two types of ML models can improve maintenance and failure predictability. An anomaly detection model detects the abnormal behavior of equipment based on the operational learnings provided from historical data. For any abnormal behavior observed, an anomaly is generated triggering a notification to the concerned personnel to take the required corrective action. The failure prediction model or remaining useful life (RUL) prediction is based on historical failure events. This model will forecast the duration up to which the respective equipment can run without failure/ breakdown. Advanced Analytics Predict Problems Earlier Advanced analytics can further optimize asset performance and processes through predictive maintenance (PdM). This allows operations, maintenance, quality and engineering service decision-makers to predict when an asset needs care. Data gathered from installed field devices, control systems, IIoT, data historians and enterprise asset management systems pass through the

analytics models to detect the anomalies and predict asset and process failures, identify the root causes of failures and prevent unplanned downtimes. According to McKinsey, advanced analytics, if applied properly, can yield returns as high as 30-50 times the investment within a few months of implementation. Moreover, they can positively transform the organizations and fundamental operating models of oil and gas production systems. Advanced analytics are powered by ML, which uses statistical methods and computing power to spot patterns among hundreds of variables in continual conditions. The patterns are used to build algorithms that analyze the parameters critical to production, quality and efficiency and alert operators for resolution before the issue becomes critical or causes a failure. Advanced analytics enable industries to improve production, profitability and margins by leveraging data from several underlying systems - employing ML and AI for smooth operations and maintenance. Critical advanced analytics components include seamless integration of various sources and systems to retrieve sensor data (history and RT), maintenance history, equipment design data, fluid properties, thresholds, alarm history and interlock limits. Analytics can provide users the required experience, expertise and history of the plant and processes to connect, identify, cleanse, model, predict and monitor various critical assets and processes. By sharing insights along with the underlying data sets and calculations for decision making, asset management improves and so does the operational efficiency of the plant. Industry 4.0 Improves Decision Making For midstream oil and gas companies, predictive maintenance has many advantages over reactive or planned maintenance, including increased equipment life, optimized equipment operations, less equipment downtime, and less staff time wasted. These solutions can be developed to address the specific requirements of the customer's framework by using IR4.0 technologies. These technologies gather plant network data and aggregate it through IIoT platforms. The data platforms can be used to create solutions for many use cases, including asset-predictive maintenance. Data platforms can be realized on cloud platforms, open-source and on-premises. AI solutions should run on live data and include historical data, contextual data and expert input. Wipro has delivered projects for predictive maintenance models using AI/ML for several plants involving hundreds of assets like compressors, pumps, heat exchangers, etc. The data can be analyzed using spreadsheets, a data historian, or reliability tools, but the required effort and time are excessive, and the results are complex and not real-time. An advanced analytics solution enables process, maintenance and inspection engineers to leverage data to predict failures and take the necessary steps to avoid unplanned shutdowns. Industry: Ramesh Srinivasan Managing Consultant, Energy - Domain and Consulting, Wipro Limited Ramesh has 17 years of experience in downstream oil and gas. His focus has been on the implementation and integration of manufacturing enterprise system applications for refineries, petrochemicals, liquid natural gas and lubricants plants. Ramesh co-authored "MESA Process Industries Guidebook: Adopting Integrated Manufacturing Operations Management (IMOM) in Oil and Gas & Petrochemical Industries, Leveraging Digital Technologies and Industry 4.0 Framework." Ashish Pathak Principal Consultant, Oil and Gas - Domain and Consulting, Wipro Limited Ashish has 18 years of experience in downstream oil and gas involving experience in process operations, process control, alarm management, process simulation, predictive maintenance

using AI/ML and project management. He has led the successful delivery of several projects for process simulation (OTS/MPDS), distributed control system (DCS/SIS) and predictive maintenance using AI/ML. Ashish is a certified Project Management Professional. The incredible velocity of the world's industrial output has inspired ongoing advancements in operational technology. Once, the Energy industry was widely seen as a laggard in https://www.wipro.com/blogs/madhu-reddy/ ----- Contact Wipro Blogs By Author Please fill the required details to access the content Madhu Reddy Madhu Reddy Head of the Customer Service and Smart Metering Practice, Utilities, Wipro Limited Madhu helps customers develop and operationalize customer experience using digital transformation strategies. He has 20+ years of global experience working with utilities, in consulting, solution architecture, program management and delivery capabilities. At Wipro, Madhu is responsible for evolving cloud partnerships and growing the utility business globally. He has a Post Graduate Diploma in Enterprise Management from the Indian Institute of Management, Bangalore. www.wipro.com/blogs/pranab-gogoi/ ---- Contact Wipro Blogs By Author Manage Risks with Quality Control Process for artworks in life sciences Industry E-Labelling: A regulatory mandate ensuring ease of business Please fill the required details to access the content Pranab Gogoi Pranab Gogoi Pranab's overall experience of ~spans over 21 years across Labeling Artwork Lifecycle Management in the pharmaceutical and lLife sciences industryies regulatory domain. He has wWorked for Mmajor Llife sesciences Consulting firms and havehas catered to customers such as Novartis, GSK, and Apotex, etc. as a rRegulatory SME. He has also sSuccessfully transitioned Ppharmaceutical regulatory processes and projects, implemented related technology and established quality management including audit preparedness and SOP writing. Let's start with a case study. A mid-sized pharmaceutical company, engaged in packaging artwork management and artwork studio services, did not deploy artwork proofreading system at the artwork studio level, though it had an electronic proofreading system in review and approval stage for the Regulatory Affairs (RA) team. Due to this structure, the approval process to finalize an artwork was long and tedious. Any error introduced by the artwork studio was picked at the review and approval stage, further adding time to the artwork approval process and increasing the number of versions. Label and artwork management in medical device companies are still seen as an afterthought and therefore, there is not enough concentration as well as investment in this area. However, with new updates such as traceability (UDI) and elabeling, companies are compelled to invest time and money to be compliant 

## E-Labelling: A regulatory mandate ensuring ease of business

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Author Contact Wipro Related Blogs MESC 2022 Reflections: MMIS Modernization and Its Value to States The Future of Well-Being: How Tech Will Impact Employee Healthcare Benefits How has the COVID-19 pandemic impacted the upcoming Medicare Advantage Annual Enrollment Period? Please fill the required details to access the content E-Labelling: A regulatory mandate ensuring ease of business September | 2022 Label and artwork management in medical device companies are still seen as an afterthought and therefore, there is not enough concentration as well as investment in this area. However, with new updates such as traceability (UDI) and e-labeling, companies are compelled to invest time and money to be compliant on the regulations required. One such update is the e-labeling requirement. Health authorities are ensuring e-labeling adherence from marketing authorization holders for their region. For instance, all medical device manufacturers in the European Union have to publish the user information, which is available in labels, technical manuals and instructions of use, on the manufacturer's website. This is in requirement with the Section 23.1 of Annex I (Chapter III) of the MDR (EU) 745/2017 and section 20.1 of Annex I (Chapter III) of In-vitro Diagnostic MDR (EU) 746/2017. This states that information related to the device needs to be published in electronic form. There is still heavy dependency on paper-based instruction manuals provided along with the device. Hence, regulatory bodies are ensuring that information pertaining to use of the device is available anywhere and everywhere with the implementation of e-labeling. There may be many reasons with printed copies fading with time, availability of hard copies at the time of use, storing capabilities of the user, etc., implying that paper-based systems are resource intensive. In addition, regulatory bodies want to reduce the carbon footprint which will help companies to reduce waste and country-based printing cost. E-labeling is gaining favor with the regulatory bodies and emphasizing on publishing electronic content. All Instructions for Use (IFUs) and Direction for Use (DFUs) are required to be available in electronic forms and all device manufactures must comply with the regulations. All major companies have already started working towards this requirement. What are the current challenges? What is required for elabeling? This requirement will be a part of supply chain requirement, and the right partner can assist you qualitatively and quantitatively and at the right cost, without impacting the current operations. Key criteria for the right partner for e-labeling includes: Industry: Pranab Gogoi Pranab's experience spans over 21 years across Labeling Artwork Lifecycle Management in the pharmaceutical and life sciences industries regulatory domain. He has worked for major life sciences consulting firms and has catered to customers such as Novartis, GSK, and Apotex as a regulatory SME. He has also successfully transitioned pharmaceutical regulatory processes and projects, implemented related technology and established quality management including audit preparedness and SOP writing. This year's event was the largest gathering in the history of the Medicaid Enterprise System Conference (MESC) according to the New England State Consortium Organization (NESCO), the organizers of the event. The employee healthcare benefits reckoning is here. The enduring impact of COVID-19 has converged with digital transformation - especially the accelerated advancement of data collection and analytics - to create sweeping changes in employee-employer relations. The chaotic pace of change in managing remote workforces and retaining top talent has placed

an enormous strain on employers. Meeting bottom lines while addressing significant increases in employee healthcare costs and premiums can become an existential struggle. The COVID-19 pandemic...

#### Manage Risks with Quality Control Process for artworks in life sciences Industry

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perspective on artwork lifecycle management, right from core labeling text to packaging artwork design to printed packaging material, Wipro offers its clients an effective proofreading/QC system that checks for quality defects The proofreading/QC checks within the artwork across the pipeline. quality management include: Wipro's proofreading/QC approaches: Once the artwork operator completes the creation of the artwork, the next process step is to do proofreading/QC of artwork created. This should be end-to-end proofreading of packaging artwork and labeling documents with the help of industry standard electronic proofreading tools for technical and text checks which may involve manual proofreading in some cases for elaborate quality check of artwork created. Activities that are required to be performed at proofreading stage may include: Other activities include: Quality assurance with artwork management is critical and its proper usage in each workflow step is vital for the success of the process. Not only does it save cost but also improves the process and functioning of the related supply chain. This allows faster production and time to market. Industry: Pranab Gogoi Pranab's experience spans over 21 years across Labeling Artwork Lifecycle Management in the pharmaceutical and life sciences industries regulatory domain. He has worked for major life sciences consulting firms and has catered to customers such as Novartis, GSK, and Apotex as a regulatory SME. He has also successfully transitioned pharmaceutical regulatory processes and projects, implemented related technology and established quality management including audit preparedness and SOP writing. Label and artwork management in medical device companies are still seen as an afterthought and therefore, there is not enough concentration as well as investment in this area. However, with new updates such as traceability (UDI) and e-labeling, companies are compelled to invest time and money to be compliant on the regulations required. Roughly 10% of the case-patient participants identified as Black. Today's patients see digital technology as an enabler in their journey to wellness - they are always connected, and this has fundamentally changed their expectations and behaviors. Read on to know more how the technology landscape is enabling this revolution in https://www.wipro.com/blogs/richa-misra/ ---- Contact Wipro Blogs By Author Planogram - Scientifically Designing a Consumer's Journey Why Transitioning to a Direct-to-Consumer Model (D2C) is a Winning Proposition for CPG Companies Please fill the required details to access the content Richa Misra Richa Misra is a Practice Solutions & GTM Lead for Retail, Consumer Goods, Telecom and Media at Wipro. She has over 20 years of experience in the BPM industry in the areas of training, quality, complaince, service delivery, business development, presales and practice. She has dabbled in multiple industries including BFSI, Retail, Consumer goods, Publishing and has managed global programs, consulting-driven engagements and aligned solutions to business outcomes. Integrating the consumer point of view and how their experience impacts sales, positively or negatively has become essential to retailing today. The effective use of physical space is essential for a retailer's success. Till recently, store layouts were often designed only keeping the convenience of the store keeper (and not the consumer) in mind with a focus on business efficiency and space management. This led to a direct impact on sales and margins; resulting in business losses eventually leading to even store closures. The consumer packaged goods (CPG) industry was badly affected by the pandemic, much

### Why Transitioning to a Direct-to-Consumer Model (D2C) is a Winning Proposition for CPG Companies

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FMCG and non-FMCG companies partner with the right IT & ITeS service provider. A good partner can ensure delivery of value to the consumer during his/her lifecycle of experiencing the product and the allied services. D2C is not just a standalone concept but an intricately woven chain of services and capabilities that include UI/UX, omni-channel customer experience, inventory management, trust & safety, order management, logistics, digital payments, product information management, analytics and reputation management. The ability to unify these services, technologies and capabilities will clearly define the next-gen CPG company that would dominate the brand wars of the near post-COVID future. Industry: Richa Misra Richa Misra is a Practice Solutions & GTM Lead for Retail, Consumer Goods, Telecom and Media at Wipro. She has over 20 years of experience in the BPM industry in the areas of training, quality, complaince, service delivery, business development, presales and practice. She has dabbled in multiple industries including BFSI, Retail, Consumer goods, Publishing and has managed global programs, consulting-driven engagements and aligned solutions to business outcomes. Integrating the consumer point of view and how their experience impacts sales, positively or negatively has become essential to retailing today. The effective use of physical space is essential for a retailer's success. Till recently, store layouts were often designed only keeping the convenience of the store keeper (and not the consumer) in mind with a focus on business efficiency and space management. This led to a direct impact on sales and margins; resulting in business losses eventually leading to even store closures. In 2020, the pandemic rattled global supply chains As the retail sector continues to adapt and evolve to a post-pandemic environment Srini Rajamani, senior vice-president & sector head - consumer and life sciences at Wipro Limited, discusses how customer expectations in 

#### Planogram - Scientifically Designing a Consumer's Journey

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It involves designing elements around shelf utilization, product placement and the visual appeal of the layout. Understanding the psychology of the consumer becomes extremely pertinent during the whole activity of space planning and store layout designing. This is why we need partners who deliver intuitive planograms designs and drafts that not only take into account all the aforementioned parameters but also deliver efficiency of operations. 70% of purchase decisions being made in stores, and 38% of unplanned sales coming from point-of-purchase (POP) displays, e-commerce only accounts for 14% of all sales, showing that brick-and-mortar retail is still consumers' preferred mode of shopping. 46% of consumers still prefer shopping in person. 90% of consumers say they are more likely to return again due to positive offline experience, 61% of consumers say they are likely to spend more at a location. Scientifically designing your store and creatively visualizing your consumer's journey using key planogram principles Planograms are most effective when all dimensions of the retail store space are exploited. The retail space includes the aisle and shelf space. It is important to consider placement of products at the right aisle or shelf (height being one of the important parameters) as it can impact the sale of the product. Apart from the shelf and aisle considerations, there are other challenges and considerations that stimulate the purchasing behavior of a consumer Planograms help retailers plan and use precious retail space. It helps them gather pertinent consumer data and make smarter merchandising choices. There are other benefits that a planogram offers - In conclusion, planogram is an art as well as a science. At this juncture, brick and mortar retailers have to not only worry about direct competitors but also the new and budding eCommerce players. With real estate getting more and more expensive, it has become ever more important to optimize every square foot of selling space. Retailers are also working hard to find a balance between wanting to sell expensive products to people who can afford them and stocking cheaper options for people who are on a budget. Directing the consumers to the right product, at the right time would lead to enhanced sales, improved profitability and superlative customer engagement. An efficient, creative and analytics driven planogram is the answer to efficient retailing. Industry: Richa Misra Richa Misra is a Practice Solutions & GTM Lead for Retail, Consumer Goods, Telecom and Media at Wipro. She has over 20 years of experience in the BPM industry in the areas of training, quality, complaince, service delivery, business development, presales and practice. She has dabbled in multiple industries including BFSI, Retail, Consumer goods, Publishing and has managed global programs, consulting-driven engagements and aligned solutions to business outcomes. Despite the long-standing history of private pension plans, superannuation was introduced to Australians over 20 years ago to help them support their retirement in a financially viable way. Fast forward to 2020; it is now a A\$3T business. Over the last two decades, superannuation has become complex, highly regulated, and vulnerable to scandals. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just neglected culture.

 Author Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Please fill the required details to access the content Shubham Upadhyay Shubham Upadhyay Solution Architect Digital Workplace Services & Infrastructure Services, Wipro Shubham has extensive experience across Consulting, Pre-sales, Solution Design in Digital Workplace Services. She has worked with global customers helping them with their digital transformation journeys while facilitating corporate growth. She is fond of gadgets and keeping herself updated with the latest technologies. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force.

### Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security?

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replacement etc. but also helping to enhance employee satisfaction, efficiency and productivity. Moreover, the increasing work from home culture brought on by the COVID-19 pandemic makes it necessary for employees to access work related applications and data from their personal devices. Having said that, does it mean that just bringing in BYOD caters to all the enterprise requirements? Not really! Over the past few years, the evolution and rapid adoption of mobile devices and organizations preferring BYOD/CYOD/BYOE has resulted in challenges in balancing employee freedom, app functionality and data security. This has in turn, motivated service integrators and OEMs to strategize security parameters and compliance adherence across enterprises. Defining a security policy for BYOD would essentially include defining the acceptable use of devices (both applications & assets), creating minimum security controls, wiping off procedures for lost/stolen devices. Wipro's Enterprise Mobility Management Framework for enhanced security Wipro's Enterprise Mobility Management Framework offers the right balance between total freedom of workforce and total control of enterprises with the ability to secure, deploy and integrate devices into a network and then monitor and manage these devices centrally. The framework is based on 4 pillars: 'Assess, Act, Adhere, and Accelerate' to provide and manage a secure mobility infrastructure. Our framework assesses the customer's mobility environment around end-to-end lifecycle management of mobile devices, program management, invoice/ expense management, Inventory management and security, compliance, and data access while creating an approach towards matured mobility. This is followed by demonstrating (act) a holistic solution across devices, apps and content. Managing plays a crucial role to bring in entire enterprise to adhere to similar guideline and policies. This helps us arrive at a one stop mobility solution and accelerate mobility management for similar organizations with devices demanding same treatment. Industry: Shubham Upadhyay Solution Architect Digital Workplace Services & Infrastructure Services, Wipro Shubham has extensive experience across Consulting, Presales, Solution Design in Digital Workplace Services. She has worked with global customers helping them with their digital transformation journeys while facilitating corporate growth. She is fond of gadgets and keeping herself updated with the latest technologies. In the evolving landscape of digital workplaces, efficient field service operations are critical in ensuring reduced downtime... appy employees usually stay at their jobs, frustrated workers often don't. Chief human resource officers (CHROs) tell us that the corporate leave of absence (LOA) process is one of the most common sources of employee frustration. Employees often rank their LOA experiences low on the satisfaction scale, using descriptors such as complicated, confusing, inconsistent, time consuming, and unresolved. In a world where business is evolving at the speed of thought, rapidly changing market conditions pose several challenges for enterprises across industries. www.wipro.com/blogs/atul-jain/ ----- Contact Wipro Blogs By Author How to Transform from Problem Solving to Customer Success Please fill the required details to access the content Atul Jain Atul Jain Domain Consulting Partner & Practice Head-Technology Products & Platforms, Wipro Limited Atul has more than 25 years of work experience in the IT Industry spanning across communications and technology with a focus on digital

transformation and customer experience. He has been instrumental in

## How to Transform from Problem Solving to Customer Success

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Shifting from a support-centric perspective to improving outcomes is a mindset evolution, but it can generate huge rewards in this type of scenario. It also demands a new structural framework for designing, delivering and managing the support function. Wipro has a framework to help make the shift by addressing CX design, enablement and operations. CX design and enablement CX operations Maximizing Value from Digitized Tech Support Enterprises understand the importance of differentiating through their CX. They also know that digitization is a huge enabler of CX. Yet the value of an outcomes-focused support function for software vendors cannot be understated, as it positively benefits all stakeholders: Wipro has been helping enterprises make this shift. A global supplier of personal computing equipment turned to digital technologies to automate and streamline the support workflow, deflecting 30% of support cases through "self-healing" systems and AI-assisted knowledge management. Another global technology leader adopted a license-based model and a service-centric mindset with support from Wipro to strategize its roadmap and training program. And a storage and software vendor established an AI and automation center of excellence with more than 50 bots that helped improve agent productivity, minimize dispatches, and improve its customer satisfaction score by more than 7%. Ultimately, this new tech support mindset will pay off in the enterprise's growth figures, top-line and bottom-line. Successful enterprises are increasingly adopting this mindset and transforming from productcentric to service-centric to an "as-a-service" business model. By transforming support functions from reactive to proactive, by focusing on outcomes rather than tactical technical support, organizations can evolve their tech-support model from a cost center to a profit center to a growth engine. Industry: Atul Jain Domain Consulting Partner & Practice Head -Technology Products & Platforms, Wipro Limited Atul has more than 25 years of work experience in the IT Industry spanning across communications and technology with a focus on digital transformation and customer experience. He has been instrumental in developing and designing Wipro's Digital BSS solution for Cable MSOs and Digital Ad Management solutions for the AdTech Industry. The metaverse is here and with its fully immersive and augmented virtual experiences far superior to anything we have witnessed before, the boundaries between our physical and digital worlds may gradually collapse for good. Subscribing to products as a service helps customers get more bang for their buck As hi-tech business models morph to accommodate new digital channels, new revenue streams, recurring revenue opportunities, and go-to-market strategies, companies need to be conscious of change across the 6 key dimensions as well.

==========================----- Arcticle source ----- https:// www.wipro.com/blogs/krishna-nacha/ ----- Contact Wipro Blogs By Author Exploring Key Dimensions to Successful Digital Transformation Please fill the required details to access the content Krishna Nacha Krishna Nacha Senior Vice President Krishna heads S.E.T (Shared Services, Enterprise Services, Transformation Services) globally for Wipro. He has 28 years of experience with a proven track record of formulating, solutioning, and scaling up shared services models for large global organizations. Krishna spearheads a 15,000+ operations team spread across 30+ centers and 11 countries and has been at the forefront of creating and ramping organic revenue growth and margin expansion models to drive the transformation strategy leveraging intelligent automation, analytics, digital, and BPaaS.

Krishna holds a Master's degree in Business Administration from XLRI Jamshedpur, India, and a Bachelor of Engineering degree from NIT Karnataka, India. Transformation is one of the most commonly used phrases, whether in the F&A space or while referring to technology, services, or organizations. Several key components, like people, process, technology, data, infrastructure, and stakeholders, enable a digital transformation.

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### Exploring Key Dimensions to Successful Digital Transformation

----- Arcticle source ----- https://www.wipro.com/blogs/krishna-nacha/ exploring-key-dimensions-to-successful-digital-transformation/ ---- About the Author Contact Wipro Related Blogs 4 Ways Super Funds Can Elevate Member Experience The CHRO Imperative for the Hybrid Workplace How organizations should identify and cope with the challenges to cultural transformation? Please fill the required details to access the content Exploring Key Dimensions to Successful Digital Transformation February | 2022 Transformation is one of the most commonly used phrases, whether in the F&A space or while referring to technology, services, or organizations. Several key components, like people, process, technology, data, infrastructure, and stakeholders, enable a digital transformation. At Wipro, we have taken a clear approach in designing transformation programs for our clients. Stakeholder experience takes precedence, followed by the process and then technology later. The key to a successful transformation is taking a business-first approach. What are the three critical dimensions of transformation? An efficacious transformation approach will have three buckets of priorities. First, it's about building foundational capabilities. Assess how you can decouple the legacy processes, systems, and architecture that are limiting the foundational aspect of operations. After that, evaluate taking advantage of technology, best-of-breed processes, and business metrics to drive scale, repeatability, and efficiencies. Second, deciding how to drive value in your operations. Transformation is all about generating value in core operations, and leveraging agility straight through the process with the help of solutions like automation, RPA, and bots. Driving contextual interactions and proactive decision-making while ensuring cross-boundary collaboration will further reign in the value of this strategy. Third, exploring new frontiers with some out-of-the-box thinking while re-examining the value in operations or services. Unlock the value from new sectors and re-assess how the stakeholder journey evolves. Ascertain how your value chain can be realigned as one integrated value chain so that the transformation moves from service-level metrics to business-level metrics. The COVID-19 pandemic left many a lesson in its aftermath. Even as it slowly reaches endemicity, the challenges are far from over. We learned that the 'new normal' really implied turning all business functions on their heads, and data integrity is ever more critical. Technology has become a key enabler in driving the growing work-from-home or hybrid work models, with data transparency and risk management at the core of this transition. How do organizations build the stomach for change? Many of us will acknowledge that COVID-19 has one of the biggest catalysts for digital transformation. The rise in e-commerce is a classic example with unprecedented volumes and adoption rates. Across industries, the pandemic had a lasting impact. Growth was severely stunted for the travel and hospitality industry, while the pharmaceutical segment saw tremendous expansion. Either way, both sectors need transformation with a change in the operating model. One can expect this pace of change to continue in the next few years. The guestion is - how do organizations prepare for this change? Do they have the appetite for this change? To drive this digital and business transformation, the organization should have adequate bandwidth to implement, adopt and drive the pace of this change across business functions, be it supply chain, F&A, go-to-market initiatives, or customer experience. Digital transformation is not just about investing in financial terms. There needs to be an all-around investment; a cultural change must go hand-in-hand, driven from top-down and bottom-up. There are several options for rapid prototyping - test it, run it and then roll out at scale, or roll back and move on. Leverage the power of technologies like artificial intelligence (AI) to enable crowdsourcing, a faster and cheaper approach. How do we build the business case for transformation? For any CFO or CPO, the business case for transformation must answer some critical questions across five key dimensions: Industry: Krishna Nacha Senior Vice President Krishna heads S.E.T (Shared Services, Enterprise Services, Transformation Services) globally for Wipro. He has 28 years of experience with a proven track record of formulating, solutioning, and scaling up shared services models for large global organizations. Krishna spearheads a 15.000+ operations team spread across 30+ centers and 11 countries and has been at the forefront of creating and ramping organic revenue growth and margin expansion models to drive the transformation strategy leveraging intelligent automation, analytics, digital, and BPaaS. Krishna holds a Master's degree in Business Administration from XLRI Jamshedpur, India, and a Bachelor of Engineering degree from NIT Karnataka, India. Despite the long-standing history of private pension plans, superannuation was introduced to Australians over 20 years ago to help them support their retirement in a financially viable way. Fast forward to 2020; it is now a A\$3T business. Over the last two decades, superannuation has become complex, highly regulated, and vulnerable to scandals. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just neglected www.wipro.com/blogs/prasun-kumar-das/ ---- Contact Wipro Blogs By Author Leveraging Blockchain in Telecom for Fraud Prevention Please fill the required details to access the content Prasun Kumar Das Prasun Kumar Das Principal Consultant, Wipro Ltd. Prasun is a digital consultant of the Intelligent Business Reimagination practice within Wipro Digital Consulting. He has over 10 years of experience across process transformation programs for Telecom and other clients across the globe. He is a digital technology enthusiast and thrives on finding ways to leverage them to realize quantified benefits for organizations. The telecom industry is complex and competitive with a multi-billion customer base across national and continental borders.

### Leveraging Blockchain in Telecom for Fraud Prevention

----- Arcticle source ----- https://www.wipro.com/blogs/prasun-kumar-das/ leveraging-blockchain-in-telecom-for-fraud-prevention/ ---- About the Authors Contact Wipro Related Blogs Unified digital delivery model for telco service providers Banks need to modernize their data infrastructure Improving performance & scalability of blockchain networks Please fill the required details to access the content Leveraging Blockchain in Telecom for Fraud Prevention February | 2022 The telecom industry is complex and competitive with a multi-billion customer base across national and continental borders. The complexity has increased with new digital products and services, cross-carrier networks, cross-border roaming services, OTT platforms, connected homes, IoT and 5G. In addition, competition from the market adds immense pressure to invest in digital reimagination to stay profitable. With thin margins, these complexities and competition are impacting the profits for communication service providers (CSPs). And while multiple forces are eroding profit margins, the most threatening is fraud. Telecom Fraud Decoded Fraud in telecom services includes unauthorized data and voice traffic, with the intent to illegally acquire money from CSPs or their customers. It often results from hacking into an inefficient subscriber verification process and can take months to detect. Fraud in telecom is a big problem. The latest survey by Neural Technologies estimates fraud to be a mammoth US \$48 billion which represents up to 10% of a CSP's bottom line. Fraud can be broadly classified into two categories: identity fraud and roaming fraud. Identity fraud involves obtaining valid authorization for a customer when signing up for telecom services. The intention is to use the services without paying. Fraudsters get access to several carrier accounts via clearinghouses or aggregated SIM accounts. This could result in attackers effectively having access to multiple money streams. Roaming fraud is another major source of fraud. Fraudsters take advantage of the inefficient roaming data exchange between carriers. A fraudulent subscriber can move from a home public mobile network (HPMN) to a visited public mobile network (VPMN) and use services without paying for them. Fraudsters can also create high-cost international calls through premium-rate numbers. The usage data is sent by the VPMN to the HPMN that becomes responsible for the service costs. Since data audits and followup actions are laborious and costly, the HPMN decides to incur the revenue loss. Blockchain is a Game-Changer in Controlling Fraud in Telecom Blockchain has been around for over a decade and can help with telecom fraud detection and prevention. For identity fraud prevention, blockchainbased identity management reduces fraud using keys. A public-private key encryption mechanism is fundamental in blockchain identity management. The cryptographic capability can link mobile and fixed telecom devices to their respective subscriber identity. While using any telecom service, instead of broadcasting the device's IMSI number (the current practice) to the network, the device can digitally sign the transaction using the private key. The public key is then broadcasted to the network. The transaction is

verified cryptographically by recognizing the public key to ensure it was initiated by a rightful subscriber with no tampering, before providing access to the telecom service. Critical Success Factors for Blockchain in Telecom Blockchain has all the potential for significant business transformation across industries and functions. The opportunities are real, and the benefit potential can be substantial. But there are crucial aspects that are required for the swift and efficient adoption of blockchain in telecom. These include: CSPs are Steadily Adopting Blockchain Applications Blockchain is already one of the most potentially disruptive technologies. And despite certain challenges and limitations, it is here to stay. Many CSPs are following a consortium-based approach to adopt blockchain-based solutions in a trusted and collaborative way. Features like real-time identity, access management and secured billing and payment solutions are the most common areas where blockchain identity management can reduce fraud. While blockchain in telecom can provide benefits to CSPs, there are challenges to overcome exit barriers with legacy technologies, regulatory conflicts with GDPR, lack of integration and interoperability, benefits currently only realized in largescale operations and lack of industry-wide standardization. But with the help of strategic technology partners like Wipro, telecom companies can overcome these challenges to leverage a blockchain ecosystem to maximize benefits and move into a more advanced, robust and secure future of telecom service. Key Steps for Telco Organizations Considering the farreaching benefits of blockchain technology, telecom organizations are building a long-term view of the future state while initiating blockchain journeys. Organizations will need new capabilities across the dimensions of strategy, people, process, data, technology and experience. Wipro is a fullsuite digital service provider of blockchain, that enables better strategy, design, build, deploy and manage service capabilities that are critical for the fast, effective and efficient adoption of blockchain. Telecom organizations are in different stages of their blockchain journeys - strategizing new models, building/launching solutions, advancing monetization models. Wipro has curated solutions that cater to the precise needs of organizations in any specific phase of blockchain integration. Industry: Prasun Kumar Das Principal Consultant, Wipro Ltd. Prasun is a digital consultant of the Intelligent Business Reimagination practice within Wipro Digital Consulting. He has over 10 years of experience across process transformation programs for Telecom and other clients across the globe. He is a digital technology enthusiast and thrives on finding ways to leverage them to realize quantified benefits for organizations. Manik Sharma Principal Consultant, Wipro Ltd. Manik is a consultant with Wipro Digital Consulting for the last 4 years, with experience in automation advisory digital transformation and business process consulting across Telecom, Technology and Financial Services industry and across multiple geographies. Mohit Johar Managing Consultant, Wipro Ltd. Mohit is a Senior Manager leading the Telecom portfolio for the Intelligent Business Reimagination practice under Wipro Digital Consulting. He has approximately 16 years of experience leading business transformation, process reengineering, simplification and automation advisory engagements across multiple industries and geographies. Manu Sharma Practice Partner & Regional Head, Intelligent Business Reimagination, Wipro Ltd. Manu is a Practice Partner in Wipro Digital Consulting (WDC) and leads the Intelligent Business Reimagination (IBR) practice of WDC for Europe. He excels in advising senior client leaders to design and build Intelligent Enterprises. Manu is advancing capabilities and adoption for Intelligent Automation, AI, Service Design, Business & Operating Model Design and Blockchain distributed consensus ledger solutions. He has served clients in Communications, Utilities, Manufacturing, Financial Services, Healthcare, High Tech, Retail and other industries. His professional focus areas are technology trends, innovation, architecting, developing, and delivering impactful solutions. Amit Rathi Senior Practice Partner, Intelligent Business Reimagination, Wipro Ltd. Amit Rathi is Senior Partner in Wipro's Consulting practice, where he leads the AI & Automation Advisory arm. He works closely with companies on a digital transformation journey. Amit helps to define and implement AI and automation roadmaps focusing on driving realistic and measurable outcomes that are human-centric and technology-agnostic. This approach helps companies find a more holistic view of automation, rather than merely focusing on a cost-reduction motive. Digitalization and Cloudification are vital to business success and not an option any more. The Telco industry is one of the first to adopt newer technologies. With the advent of digital native customers, banks are facing a paradigm shift in their customer behavior. Performance and scalability of IT systems have always been the key nonfunctional requirements that are used to gauge the production-readiness of source ----- https://www.wipro.com/blogs/vinay-firake/ ----- Contact Wipro Blogs By Author What Banks Need to Know About Nordic Cross Border Payments or P27 Please fill the required details to access the content Vinay Firake Vinay Firake Sr. Vice President & Managing Director-Nordics Business Unit WiproVinay is an accomplished business leader in the IT/ITeS industry and has recently take over as the Sr. Vice President & Managing Director of Wipro's Nordics business unit. He has led the growth of large, global P/Ls across multiple sectors. He is passionate about creating client success & business value through IT and operations led transformation. He has been instrumental in establishing several technology and digital operations practices While P27 is expected to bring many efficiencies to the payments system in the Nordic region, participating banks will need to take deliberate steps to prepare for this new platform.

#### What Banks Need to Know About Nordic Cross Border Payments or P27

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initiative, or P27, began in 2017 to simplify cross-border payments among Nordic countries. P27 is the first integrated real-time platform in the Nordics region formed by six major banks - Danske, Handelsbanken, Nordea, OP Financial Group, SEB and Swedbank. The platform will facilitate both domestic and cross-border payments in multiple currencies, in realtime while harmonizing the Nordics and the European payments landscape. The first live transactions are expected in 2022 in three countries -Denmark, Finland and Sweden. If successful, operations will expand to other Nordic countries. And while P27 is expected to bring many efficiencies to the payments system in the Nordic region, participating banks will need to take deliberate steps to prepare for this new platform. Why the Nordics Need the P27 Payments System The P27 initiative was started mainly to address the existing shortcomings inherent in the Nordic payments system that often lead to higher cost and handling time. These shortcomings include: As such, any transaction between Nordic countries must go through a foreign exchange process which increases the payment handling time. Additionally, the fragmented settlement and clearing process in each country drives the cost per transaction higher. Unlike the EU where a transaction between two nations occurs through the cost-effective Single-Euro Payments Area (SEPA), in Nordic countries, the different currencies force a settlement to happen through the SWIFT network. The transaction costs through SWIFT are about 3-4% of the transaction amount. As the transactions go through multiple banks, consumers incur higher transaction charges. Furthermore, consumers and businesses in Nordic countries often make cross-border transactions forcing them to have multiple bank accounts across these countries. This creates operational inefficiencies and higher processing times. The P27 platform will help address most of these concerns by enabling guick, real-time, batch, domestic and cross-border payments on a secure platform. The new infrastructure will bring simplicity and scale efficiencies while harmonizing and standardizing payments with better transparency. Furthermore, it will allow financial players to build complementary value-add services on top of the basic infrastructure. P27 Readiness Check for Banks While there are many benefits for ecosystem participants, the banking system will be faced with numerous challenges in the end-to-end implementation of the P27 platform. The following challenges could deter banks from enjoying the expected benefits arising from the new payment's platform: Imperatives for Banks Derive Benefits from P27 While working with banks across the globe, Wipro's analysis revealed that many banks may face possible issues that will prevent them from enjoying the full benefits of P27. These issues include an outdated infrastructure, an obsolete security system and a lack of financial firepower and technology prowess. To overcome these issues, banks should address the constructive actions below to ensure they are better placed to adopt the P27 initiative. Over time, P27 will increase interoperability, efficiency and save processing time. This will not only benefit consumers with more faster payments but it will open a wide new range of opportunities for financial institutions to collaborate and improve the consumer experience. While all Nordic banks will be watching the beta transaction program this year, taking steps now to prepare for a wider rollout is not only prudent but will help banks reap the full benefits of this new payment landscape. To read more about the Nordic Cross Border Payments initiative (P27) click here. To follow the developments of the Nordic Payments Council (NPC) click here. Contributors: Industry: Vinay

Firake Sr. Vice President & Managing Director-Nordics Business Unit WiproVinay is an accomplished business leader in the IT/ITeS industry and has recently take over as the Sr. Vice President & Managing Director of Wipro's Nordics business unit. He has led the growth of large, global P/Ls across multiple sectors. He is passionate about creating client success & business value through IT and operations led transformation. He has been instrumental in establishing several technology and digital operations practices Stefan Olsson General Manager-BFSI Hunting in the Nordics Business Unit, Wipro Stefan joined Wipro since 2021 to lead BFSI in the Nordics. He is a passionate executive focusing on how the world of banking is changing rapidly into a highly digitalized, customer centric, open, automated and agile sector. Stefan is highly results driven and has a long track record of helping clients solve complex business problems India's payment journey has changed significantly over time. What started as a barter system has evolved into cashless payments Migrating your data and services to a public cloud service like Google Cloud offers multiple advantages, including increased flexibility and agility.... Traditional banks are reinventing themselves to meet rapidly evolving customer expectations, www.wipro.com/blogs/dharam-pratap-singh/ ----- Contact Wipro Blogs By Author Developing an Effective Technology Planning Strategy for Mining Capital Projects Please fill the required details to access the content Dharam Pratap Singh Dharam Pratap Singh Principal Consultant - Mining, Wipro Limited. Dharam Pratap Singh is part of Wipro's Mining Practice and focuses on digital transformation initiatives in the mining and metal industry. He has worked in geology, mining, processing plants, supply chain operations, and applications areas. He has deep experience in consulting and implementing digital solutions for 'mining pit to port' business processes, mining capital projects, warehouse operations, data analytics projects using mining operational data, and application management. This has led to an upsurge in capital investments and a greater need for effective technology planning strategies as enterprises replace legacy platforms with 

#### Developing an Effective Technology Planning Strategy for Mining Capital Projects

---- Arcticle source ---- https://www.wipro.com/blogs/dharam-pratap-singh/developing-an-effective-technology-planning-strategy-for-mining-capital-projects/ ---- About the Author(s) Contact Wipro Related Blogs Sustainability Begins with "Me" AI and Automation is not a One-Stop Shop Please fill the required details to access the content Developing an Effective Technology Planning Strategy for Mining Capital Projects March | 2022 Over the past decade, mining companies have been focused on achieving new operational efficiencies, rather than starting greenfield projects. Today priorities have changed due to increased economic activity, and mining organizations are under greater pressure to deliver on growth promises to stakeholders. This

has led to an upsurge in capital investments and a greater need for effective technology planning strategies as enterprises replace legacy platforms with new platforms. As companies begin capital projects to adopt the latest tech innovations, devising a comprehensive plan is key to unlocking the true potential of mining operations and optimizing mine production. To see benefits quickly, such as increased productivity and profit margins, a techplanning strategy should ensure that the foundational platforms of a digital transformation are integrated upfront. Then once a mine enters the production phase, digital solutions will be in a working state and start impacting the triple bottom line of the mining company. The typical capital project life cycle The capital project life cycle consists of the following stages, and a technology plan should cover each one: The challenges of mining capital projects During the various stages of a capital project, a mining company will face a number of challenges, as described below. Having a clear understanding of these issues will help create a comprehensive tech planning strategy: All the above impact capital project delivery, as well as the future state of mining operations and the ability to meet growth targets. Preparation for each of these challenges will help avoid making tech investments that don't cater to the complexity of business requirements or that don't facilitate decision making and collaboration. An effective approach to tech planning Since mining companies develop multiple capital projects at the same time, creating a comprehensive techplanning strategy that covers all of them would be an effective means of ensuring capital projects deliver successful results. The suggested approach is to create a tech-planning playbook built on hybrid information (general and site-specific elements), so that it can be reused for other capital projects with modifications to any site-specific elements (such as business and IT systems). The site-specific elements, for example, should address requirements needed at the site, such as borehole data management software during project initiation or the need for lab information management system (LIMS) software to process ore samples during, say, the pre-feasibility study. The general elements would include tools such as contractor management and procurement-capable software used during the EPC and mine development stage. Such a playbook should contain information on standardized applications and systems and the infrastructure needed. This information would be based on a maturity assessment, gap analysis, cost-benefit analysis, and scoring criteria (alignment with business, finance, technology, and support needs). This will help an organization select the best-fit solution from the market as per business requirements. The playbook should also identify the available systems that can be leveraged and provide a roadmap for implementing future solutions. The roadmap would need to include a comprehensive tech-commercial plan with work programs such as Corporate Services, Mining Technical Systems, Site Infrastructure and Security, Environmental and Safety, and Data-Driven Operations. With the appropriate stage gates, the results would be a smooth implementation of new technologies to streamline mining operations. The benefits of early technology planning Technology planning for an upcoming capital project provides an opportunity to achieve benefits that improve productivity, safety, and cost by making mining operations more efficient. By conducting this planning early in the process, enterprises can utilize data generated by analyzing areas such as fleet and dispatch management, short interval control, value drivers, and performance management. The typical

benefits are a reduced maintenance spend of 10 to 15%, reduced logistics costs of 10 to 20%, and productivity improvements of 10 to 20% with a positive impact on revenue and costs. The generated data can also provide a foundation for the further implementation of data-driven-platforms equipped with the latest emerging technologies, such as real-time monitoring, artificial intelligence, and machine learning. Based on Wipro's mining experience, the development of a capital project playbook helps avoid surprises during the operational readiness phases, and by the time the mining operations stage commences, the technologies will start providing a strong return on-investment (ROI) early in the life of the mine. Industry: Dharam Pratap Singh Principal Consultant - Mining, Wipro Limited. LinkedIn: https://www.linkedin.com/in/dharampratapsingh/ Email: dharam.pratap@wipro.com Dharam Pratap Singh is part of Wipro's Mining Practice and focuses on digital transformation initiatives in the mining and metal industry. He has worked in geology, mining, processing plants, supply chain operations, and applications areas. He has deep experience in consulting and implementing digital solutions for 'mining pit to port' business processes, mining capital projects, warehouse operations, data analytics projects using mining operational data, and application management. Sudip Chaudhuri Global Practice Head - Mining, Wipro Limited. LinkedIn: https://www.linkedin.com/in/sudip-chaudhuri-3808bb11/? originalSubdomain=in Email: sudip.chaudhuri@wipro.com Sudip Chaudhuri heads the Mining Practice for the Energy, Natural Resources, and Utilities business unit at Wipro. With over 20 years of varied information technology experience in mining and mineral processing, Sudip has worked with numerous clients in the mining and minerals industry on transformational and advisory assignments, and designing end-to-end programs. With deep domain experience across the mining and metals business, he has been able to effectively apply new technologies to bring about improvements in productivity and safety in the mining context. The widespread work-fromhome trend caused by the Covid-19 crisis contributed Mining companies are taking an increasing interest in adding components of AI and Automation into their digital landscape to cover a host of uses cases from document investigation on geological surveys, environmental impact studies, and complex reports and documents on safety and assets using natural language processing (NLP), as well as processing of old paper-based mapping and drill logs into digital formats to exploration targeting, for regional areas and Arcticle source ---- https://www.wipro.com/blogs/john-hermans/ ---- Contact Wipro Blogs By Author Taking an "Assume Compromise" Security Mentality Please fill the required details to access the content John Hermans John Hermans Head of Europe, Cybersecurity & Risk Services, Wipro John is the Head of Europe SMU for Cyber Security & Risk services at Wipro Limited. He has worked for 21 years at one of the Big-4 as an equity partner, responsible for cybersecurity services in the Netherlands and EMA region. John has worked for numerous international and national organizations in most industry sectors, such as Financial Services, Oil & Gas, Telecommunications, Retail, and Government. John was also involved in more than 150 national and international cybersecurity projects worldwide. His significant involvements included advising and supporting our clients in developing, defining, and implementing their overall cybersecurity strategies and building the required business cases for

#### Taking an "Assume Compromise" Security Mentality

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time, and resources, malicious threat actors can circumvent these preventative controls, and they often do so silently. The change in mindset to assume compromise alters how organizations think about their security challenges. Instead of focusing on preventative controls to keep threat actors out, the focus is on establishing sufficient visibility inside the environment and incorporating advanced detection and response capabilities to mitigate threats that already bypass existing controls. A more modern approach means preparing for when things go wrong and ensuring your organization can do something about it. Upping your security game with Zero Trust Zero Trust plays a vital role in an 'assume compromise' approach. There are countless examples of ransomware attacks in which bypassing a company's initial perimeter controls resulted in adversaries getting unrestricted access to corporate resources. As a result, being inside the corporate network is no longer a reason to trust a user or device. By never trusting any user or device by default, the zero trust model continuously verifies user and device identities on the network regardless of their physical locations. Requiring authentication each time a user or device requests access to different resources mitigates the problem of placing implicit trust in users or devices. The result is that when an attacker inevitably finds a weakness in any preventative control, the lack of default trust limits the scope of what that person can do on your network. An 'assume compromise' mentality poses some challenges in educating security practitioners about the actualities of a compromise. If security teams start assuming they will get hacked, then a solid grounding in at least the fundamentals of offensive security can go a long way to help internalize this new mindset shift. Securing digital transformation and cloud adoption Digital transformation and cloud adoption further accelerated due to the Covid-19 pandemic. Small businesses began selling more products and services from websites, and enterprises started to shift more workloads to the cloud to facilitate remote workers and innovate. Ultimately, digital transformation and cloud strategies provide businesses with productivity, cost-efficiency, innovation, and growth. Security practitioners need to enable these transformations more securely. While seizing these opportunities is undoubtedly a net positive for businesses of all sizes, digital transformation projects are conducive to misconfigurations and carry new security monitoring challenges. An 'assume compromise' mentality readies security teams for the inevitable changes and risks arising from transforming business processes. From a security operations perspective, digital transformation strategies call for answering some critical questions, such as: Towards a more secure future with advanced detection and response Today, ransomware operations focus on data exfiltration before encrypting sensitive files and essential systems. Initial compromise followed by lateral movement and privilege escalation through the network defines these threat actors' operations. When it comes to technologies and processes, it's clear that preventative controls are in place for most businesses, but they're not enough. Greater visibility from advanced detection and response capabilities help achieve proper alignment with an 'assume compromise' mentality and stop today's most dangerous ransomware attacks in their tracks. Cloud infrastructure presents opportunities to scale and automate security processes. Royal Sun Alliance (RSA) Insurance Group did just that. The general insurance company, headquartered in London, looked at a portfolio of vendors to mature its detection and response capabilities and equip

security practitioners to fight back against modern ransomware attacks. RSA chose Vectra for some of the following reasons: If you are interested in watching the discussion between Nuno Andrade, CISO RSA, John Hermans, Head of Europe Cybersecurity & Risk Services Wipro, Tim Wade, Office of CTO, Technical Director Vectra, and Sacha Rehmat, Director of Global Service Providers & Systems Integrators Vectra AI, you can listen here. Industry: John Hermans Head of Europe, Cybersecurity & Risk Services, Wipro John is the Head of Europe SMU for Cyber Security & Risk services at Wipro Limited. He has worked for 21 years at one of the Big-4 as an equity partner, responsible for cybersecurity services in the Netherlands and EMA region. John has worked for numerous international and national organizations in most industry sectors, such as Financial Services, Oil & Gas, Telecommunications, Retail, and Government. John was also involved in more than 150 national and international cybersecurity projects worldwide. His significant involvements included advising and supporting our clients in developing, defining, and implementing their overall cybersecurity strategies and building the required business cases for executive boards and supervisory boards. As a cyber security strategist, he also engaged in multiple M&A deals (pre-deal assessment and due diligence activities). John specializes in both audit and advisory services in the fields of information/cybersecurity, information risk management, digital risk management, and cloud computing." A tidal wave of ESG regulations is looming across markets. To prepare, companies are shifting responsibility for sustainability management and reporting to the risk management domain. Risk executives are investing in enhancing their governance, risk management, and compliance (GRC) systems to account for ESG factors. The ability to exchange cyber threat intelligence (CTI) in privacy preserving and in a secure manner is vital for enterprises to manage their security risks effectively. During the pandemic, dependence on digital technologies has seen unprecedented growth. From managing remote workforces to catering for changing customer expectations, the paradigm shift towards digital has Arcticle source ----- https://www.wipro.com/blogs/omkar-khadilkar/ -----Contact Wipro Blogs By Author Automated Data Preparation Streamlines and Refocuses Data Management Strategy Please fill the required details to access the content Omkar Khadilkar Omkar Khadilkar Senior Architect, Wipro Ltd. As a Senior Architect, Omkar helps clients accelerate and de-risk their business transformation journey by keeping data management at the forefront. He has more than 22 years of global experience, particularly in data integration, data migration and data quality initiatives that allow business growth while ensuring data compliance. The data preparation and validation process for enterprise applications is the fundamental requirement for enabling effective data quality...

#### Automated Data Preparation Streamlines and Refocuses Data Management Strategy

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data enrichment, manipulates and reports on any data and exports the data so that it can be loaded into a target application using native APIs/utilities. Administer The administer component is the single point of management and administration for data security roles and authorization so that the right users are empowered for data construction, validation or enrichment. Automating Data Preparation Delivers Business Benefits Traditionally, data preparation activities have been addressed by IT teams even though data ownership lies with enterprise business users. But automating data preparation and validation processes with business user intervention, allows self-service benefits to be realized more efficiently: Simplifying Automated Data Preparation and Validation There are obvious challenges in the traditionally managed data preparation process. Consolidation and monitoring with different versions of data sets prepared manually on spreadsheets reduce data quality. Conflicts in data validation and enrichment result in back-and-forth iterations between various users wasting time and effort. Unauthorized access to sensitive data leads to legal and compliance issues. Automating data preparation allows companies to resolve all of these issues and put business users at the center of the process, reducing the time and expense traditionally required to maintain data. Wipro has delivered over 200+ successful data migration implementations while utilizing an automation framework for data preparation. The framework has been successful for large-scale multi-year, multi-country, multi-vendor global rollouts. Moreover, Wipro's data and analytics solutions team has developed IP accelerators for automated data preparation and validation as well as integrated third-party products for data preparation. These platforms are industry-agnostic, with the intent of providing user-driven data construction and validation features. Industry: Omkar Khadilkar Senior Architect, Wipro Ltd. As a Senior Architect, Omkar helps clients accelerate and de-risk their business transformation journey by keeping data management at the forefront. He has more than 22 years of global experience, particularly in data integration, data migration and data quality initiatives that allow business growth while ensuring data compliance. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force.

==========================----- Arcticle source ----- https:// www.wipro.com/blogs/vinod-panicker/ ----- Contact Wipro Blogs By Author Exchange of Cyber Threat Intelligence Among Peers Using Decentralized Identity Networks and IoFT Please fill the required details to access the content Vinod Panicker Vinod Panicker Global Head, Open Source & Blockchain Security, Cybersecurity & Risk Services, Wipro Vinod has over 21 years of experience in software development and product architecture. Vinod currently leads the open source and blockchain security initiatives for the cybersecurity practice at Wipro. He is an expert in decentralized

#### Exchange of Cyber Threat Intelligence Among Peers Using Decentralized Identity Networks and IoFT

----- Arcticle source ----- https://www.wipro.com/blogs/vinod-panicker/ exchange-of-cyber-threat-intelligence-among-peers-using-decentralizedidentity-networks-and-Ioft/ ---- About the Authors Contact Wipro Related Blogs Risk in the ESG Age Cybersecurity through collaboration Detective and Preventive controls for cyber-attacks like Solorigate with IAM tools Please fill the required details to access the content Exchange of Cyber Threat Intelligence Among Peers Using Decentralized Identity Networks and IoFT March | 2022 The ability to exchange cyber threat intelligence (CTI) in privacy preserving and in a secure manner is vital for enterprises to manage their security risks effectively. Securing the CTI involves sanitizing privacy data from the identified threat information and dynamically generating Indicators of Fraudulent Transactions (IoFT) that will contain only the relevant CTI. The exchange is facilitated by usage of the decentralized identity network that permits participants on the network to establish trust with each other and avail secured communication channels to exchange information. However, there are some inherent challenges: An innovative solution to mitigate threats IoFT are cyber threat intelligence metadata derived from the fraudulent behaviour pattern that is relevant for each domain. These fraudulent patterns are validated by respective domain experts. The IoFT will be devoid of any privacy information, but will have sufficient data elements to convey potential cyber threats as applicable for the respective domain. This offers greater confidence for peers to collaborate and address common cyber threats more effectively. In addition, The infographic above depicts a trust network of financial Institutions. In the Figure Enterprise A & Enterprise B are financial institutions, both participants of the trust network. The Enterprises can leverage the decentralized Trust network to exchange CTI information using IoFT among the peer participants of the network. Enterprise A can exchange details of fraudulent transactions that it has identified with the peer organization Enterprise B in privacy preserving manner using IoFT. This would help Enterprise B to address similar fraudulent transactions more effectively, thereby preventing incurring financial losses by such transactions. Here are a few use cases that demonstrate the applicability across various business domains: Organizations can identify and weed out fraudulent transactions in the shortest possible time. Access to quality threat intel and diligent information sharing amongst peers can help minimize enterprise risk. With

IoFT based solutions, organizations can now restrict what is being exchanged to actionable CTIs without exposing confidential information of the organization. Industry: Vinod Panicker Global Head, Open Source, Blockchain and AI Security, Cybersecurity & Risk Services, Wipro Vinod has over 22 years of experience in software development and product architecture. Vinod currently leads the open source, blockchain and AI security initiatives for the cybersecurity practice at Wipro. He is an expert in decentralized identity, blockchain security, building open source solutions, community-led tools development, open-source licensing, and re-engineering of products. Sumod Rajan George, PMP Sr. Project Manager, Cybersecurity and Risk services, Wipro Sumod has over two decades of experience in software development, managing various projects and programs for business domains, such as retail, finance, healthcare, and transportation. He is currently part of the open source and blockchain security practice team with CRS, which focuses on security for open source and blockchain technology-based solutions. A tidal wave of ESG regulations is looming across markets. To prepare, companies are shifting responsibility for sustainability management and reporting to the risk management domain. Risk executives are investing in enhancing their governance, risk management, and compliance (GRC) systems to account for ESG factors. During the pandemic, dependence on digital technologies has seen unprecedented growth. From managing remote workforces to catering for changing customer expectations, the paradigm shift towards digital has brought a host of security challenges. The cybersecurity industry was deeply shaken by the Solorigate attack, the impact of which is still being felt in the cybersecurity space. Several companies have already started addressing this Arcticle source ---- https://www.wipro.com/blogs/bhargav-kumar-mitra/ -----Contact Wipro Blogs By Author Ethical AI: Looking Beyond Accuracy to Realize Business Value Please fill the required details to access the content Bhargay Kumar Mitra Dr. Bhargay Kumar Mitra Data-Science Consulting Partner, Wipro, Ltd. Dr. Mitra has over 18 years of experience in Computer Vision, Machine Learning and Graph Mining. He specializes in driving innovative ideas in the data-science space through to their commercial fruition. Bhargav holds a DPhil in Computer Vision from the University of Sussex and an MBA from Warwick Business School. AI is becoming ubiquitous in our everyday life - showing recommendations for on-demand/ non-linear media platforms, product-bundle suggestions on e-commerce or catalog-retailer websites, social media advertisements, applications for jobs, universities and bank loans, and more. AI is either independently driving 

#### Ethical AI: Looking Beyond Accuracy to Realize Business Value

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Author(s) Contact Wipro Related Blogs AI Driving 5G Innovations for Communications Service Providers Making ML Models in Banking Resilient using Adversarial Attacks Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Please fill the required details to access the content Ethical AI: Looking Beyond Accuracy to Realize Business Value March | 2022 AI is becoming ubiquitous in our everyday life showing recommendations for on-demand/non-linear media platforms, product-bundle suggestions on e-commerce or catalog-retailer websites. social media advertisements, applications for jobs, universities and bank loans, and more. AI is either independently driving these decisions or enabling the process. This gradual proliferation of AI in our daily lives and the significant impact it can make to change a consumer's course have led to increased scrutiny by the public and regulatory bodies. With this increased focus, a rogue AI/ML system could easily tarnish the brand image of an organization. Real-life occurrences of undesirable consequences like discrimination in recruiting or lending, autonomous car decisions that lead to accident liability, search engines showing results based around bias, etc., have come to light, adding concern to AI/ML stakeholders. The increased focus on AI is leading to new regulations and frameworks that will improve the ethical standards of AI models. Increasing Concern Among Business Leaders Regulators and policymakers across geographies are stepping in with regulatory frameworks and guidelines to ensure Ethical AI implementation. In the US, the Algorithmic Accountability Act (AAA) has been introduced to empower the Federal Trade Commission to conduct impact assessments of algorithmic "automated decision making" (including AI/ML). AAA aims to evaluate automated decision-making systems from different aspects including accuracy, fairness, bias, privacy, AI explainability and security. The European Union (EU) also released its draft AI regulations in April 2021. They employed a risk-based approach for AI regulations. The objective is to categorize AI/ML systems as 'unacceptable', 'high', or 'low' risk systems based on their intended use. Roque events and the upcoming regulations continue to instill fear in the minds of business leaders that are leveraging customer-facing AI/ML (CF-AI) systems or creating new models. This hesitation can be attributed to one or more of the following factors: Uncertainty about model fairness Is the model output discriminating against a particular sub-group of people? Building an AI/ML model is complex and not always easy to detect when bias has been introduced. Bias can lead to reputational damage or attract legal penalties. Lack of customer trust in models If customers are unhappy with the models and don't trust the decisions reached, it can cause reputational harm to the company. Even if a human were to make the same decision as an algorithm, AI explainability is a concern. Stability and robustness of the models There are increasing concerns about privacy and stability when deploying new models. A model built today might not be stable in a couple of weeks due to the changing environment and volatility. And there is pressure on the business to protect client data. A model is another area where a customer's personal identifying information could be exposed, which could then be exploited through cyberattacks. Lack of skilled labor Leaders are concerned about using a technology that requires a dearth of subject matter experts. Do they have the talent to maintain the models? Are models being sent to production with the right best practices? While companies are now launching products that make AI and ML development easier, the scarcity of industry experts

introduces risk. These concerns are causing AI projects to get trapped in the AI/ML experimentation pit without ever realizing the intended ROI from these ventures. Accuracy is Not Everything Businesses Should Care About When creating a new model, in most cases, success/exit criteria for use cases primarily revolve around some baseline performance figures. These figures are obtained directly from an "as-is" state or the subjective judgment of business stakeholders. The solution design decisions rest with the data scientists who perform the exploratory data science work with a central focus on beating the initial baseline accuracy figures or improving the performance metrics. As such, no or little attention is paid to ethical AI design considerations like minimizing unwanted bias in the system or a trade-off between AI explainability and performance. These considerations are an afterthought once a model has been identified for a use case. Business leaders set up expectations that the performance of an ML model is the solo success criteria of a project. This, combined with non or selective adherence to MLOps best-practice and an absence of adequate AI regulations and governance controls in place, dictates the solution building and deployment workflow where adherence to ethical concerns in the design is most likely overlooked. Realizing AI Strategy and Protecting High Risk and CF-AI Systems Business leaders need to consider action plans to mitigate the risks associated with the operation of AI systems (especially for 'high-risk' and CF-AI systems). This will enable companies to bring their investments caught in AI experimentation pits back on track to realize the AI strategy. Enterprises should consider three things to be run in concert: Upskilling employees with Ethical AI considerations Businesses should focus on their people. Efforts should ensure that employees are aware of Ethical AI, the directives of AI regulations and the value of following MLOps best practices for the entire life cycle of an AI system. Specifically, employees working on models need to be trained on how to minimize its bias and make it explainable. Infusing transparent processes and frameworks in model creation and deployment Outline industry and market-specific frameworks that enable stakeholders to describe fairness for each use case. The framework should strike a balance between explainability, performance and minimizing bias while supporting the critical stages of design and development. This could include extending the Governance and Compliance (G&C) framework to oversee the use and design of AI-ML systems from inception to production and post-production, thereby mitigating all AI/MLspecific risks. The framework, combined with AI regulations, should allow the provisioning of two broad pathways at the initial AI opportunity qualification stage: one for internal business-facing AI systems and the other for 'high-risk' and/or CF-AI systems. The pathway for 'high-risk' and/or CF-AI systems should have appropriate G&C measures for human oversight, data privacy, AI explainability, accountability, system robustness, stability and fairness. Explore tooling to build high-quality AI/ML-systems Tools can mitigate risks by detecting bias, verifying AI systems for robustness and stability, serving models into production, explaining the predictions produced by a model, and flagging data and model-performance drifts. Numerous tools are available including open-source algorithms like LIME and SHAP for explainability, platforms and services from the cloud hyperscalers or other market offerings from start-ups and scale-ups. Business leaders can provide the tools for their skilled workforce to vet their models and training data. Companies must consider the aspects of

maximizing the business value of their AI systems while also ensuring the data is fair and protected. Are companies prepared for the AI regulations that are soon to be enforced? What are the appropriate courses of action for infusing the above strategies into their AI modeling? The answers to these questions lie in how people, processes and tools should be utilized to help keep their models fair, ethical and trustworthy. Industry: Dr. Bhargav Kumar Mitra Data-Science Consulting Partner, Wipro, Ltd. Dr. Mitra has over 18 years of experience in Computer Vision, Machine Learning and Graph Mining. He specializes in driving innovative ideas in the data-science space through to their commercial fruition. Bhargav holds a DPhil in Computer Vision from the University of Sussex and an MBA from Warwick Business School. Mark Smith Machine Learning Consultant, Wipro, Ltd. Mark has run numerous projects helping companies adopt AI, ML and cloud services. He has spent most of his career bringing new technologies to customers. He holds an MBA from the University of Chicago Booth School of Business and a BS in Electrical Engineering from the University of Evansville. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force.

www.wipro.com/blogs/jasjit-singh-kang/ ---- Contact Wipro Blogs By Author An insight into how improving customer experience depends on humanizing tech Making HR more effective in 2022 Please fill the required details to access the content Jasjit Singh Kang Jasjit Singh Kang SVP & Business Head: Digital Operations & Platforms(DOP)-iCORE, Wipro Limited Jasjit leads global delivery for Wipro HR Services, Healthcare and BFSI. He is responsible for client relationships, operations and growth for these practices. With over 28 years of experience, Jasjit has worked in the areas of operations management, technology based innovation, business development and relationship management. Customer experience is a critical differentiator in the post-COVID world of work... The role of HR in the post-pandemic world has expanded, and it is now a priority for HR to compress costs and improve profitability—strategically. This period of swift transformation has caused businesses to bring HR to the forefront for navigating employees and employers successfully.

#### Making HR more effective in 2022

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CHRO Imperative for the Hybrid Workplace How organizations should identify and cope with the challenges to cultural transformation? Please fill the required details to access the content Making HR more effective in 2022 March | 2022 The role of HR in the post-pandemic world has expanded, and it is now a priority for HR to compress costs and improve profitability strategically. This period of swift transformation has caused businesses to bring HR to the forefront A survey revealed that 34% of HR leaders planned to optimize their HR function budget in 2021. The focus of organizations today is on optimizing investments to improve employee experience throughout their life-cycle within an organization, along with employee benefits and employee well-being. There is also a need to prepare businesses for the future of work. Leaders are expected to invest time, effort, and money into building partnerships that can influence the learning agility of the organization and its employees. Aligning employees' personal goals with business goals has become important to revive the working economy. And many of them are looking for help to begin right. With the dawn of 2022, as the world prepares to rebound and re-grow, a sustainable cost optimization road map is of immense value. Here are my top 3 tips for leaders to make HR more effective by ensuring intelligent cost optimization across the hire-to-retire employee lifecycle. 1. Begin with making smarter talent-based hiring decisions Deploy a two-pronged approach for this. a. Integrate remote interviews and temporary labor with your hiring agenda Leaders must begin to rethink traditional hiring strategies like on-campus interviews with alternate remote interview methods. You shouldn't shy away from choosing temporary labor arrangements such as gig employees or freelancers to encourage a speedier economic recovery. b. Tweak your hiring strategies with agile, current data insights HR leaders must tweak their hiring drives with such insights. A customized program for neurodivergent employees in real time using training software can help them secure the right talent. You should be quick on your toes when it comes to leveraging data-driven insights to modify your current style of shortlisting talent. 2. Foster a culture of "continual learning" Choose the right tech-empowered partner organizations that can help design smart, personalized learning and development plans for your employees. Invest in Learning Experience Platforms (LXPs) that leverage powerful data insights and provide interactive learning modules in a few clicks. 3. Choosing flexible and simple performance evaluation models A report by Gartner HR Research revealed that organizations that choose flexibility in managing employee work lives are three times more likely to experience higher, better performance. Successful organizations have considered flexibility a must while undertaking cost optimization initiatives with respect to employee performance. Businesses now need to evaluate employees against their selfauthored goals in line with organizational objectives. This also implies that a user-friendly performance management system must be available. Here's a checklist for you to consider while choosing the right performance management system: Figure: Things to consider before choosing a performance management system Measuring human resource costs has always been one of the most popular components of HR accounting. To combat the disruption and economic uncertainty caused by the pandemic, HR leaders all over the world, are asked to take more responsibilities to reduce costs. But it is advisable to not view HR cost optimization as a shortterm goal, especially when evaluating potential initiatives that offer

immediate savings and rule out unforeseen business impact and key tradeoffs. When HR costs are optimized, leaders get to explore new and impressive ways of operating, being creative, and building morale. As times are changing, businesses cannot afford to not optimize HR costs. And, they shouldn't. Industry: Jasjit Singh Kang SVP & Business Head: Digital Operations & Platforms(DOP)-iCORE, Wipro Limited Jasjit leads global delivery for Wipro HR Services, Healthcare and BFSI. He is responsible for client relationships, operations and growth for these practices. With over 28 years of experience, Jasjit has worked in the areas of operations management, technology based innovation, business development and relationship management. Despite the long-standing history of private pension plans, superannuation was introduced to Australians over 20 years ago to help them support their retirement in a financially viable way. Fast forward to 2020; it is now a A\$3T business. Over the last two decades, superannuation has become complex, highly regulated, and vulnerable to scandals. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just neglected culture.

# An insight into how improving customer experience depends on humanizing tech

---- Arcticle source ---- https://www.wipro.com/blogs/jasjit-singh-kang/aninsight-on-how-improving-customer-experience-cx-depends-on-humanizingtech/ ---- About the Author Contact Wipro Related Blogs 4 Ways Super Funds Can Elevate Member Experience The CHRO Imperative for the Hybrid Workplace How organizations should identify and cope with the challenges to cultural transformation? Please fill the required details to access the content An insight into how improving customer experience depends on humanizing tech July | 2022 73% of business leaders find a direct connection between customer service and business performance. The Customer Experience (CX) Trends Report 2022 Customer experience is a critical differentiator in the post-COVID world of work. With advanced digital technologies available at their fingertips, customers have become sellers—and every impression/interaction they undergo is easily an essential factor in deciding the sustainable growth of a brand. However, the recent shifts in consumer behaviors and expectations have caused a paradigm shift in the leader mindset: customers expect organizations to humanize technology to gain loyalty and future-proof their next normal. We must make technology as trustworthy and accessible as possible. As leaders, our ultimate responsibility should only be about designing technology and automating it to improve 'human to human' and 'human-to-technology'

interfaces. It should be technology that works for humans—It should not be humans to work on themselves to use it. Humanizing employee experience is a great first step. We must begin with humanizing automation for employees (because employees play a pivotal part in managing customer journeys, especially across all the digital touchpoints.) Firstly, we should have a comprehensive plan to reduce the overall employee effort by removing menial and repetitive sub-activities in a process. Organizations can use smart automation technologies such as artificial intelligence (AI), machine learning (ML), and natural language processing (NLP) to smoothen the workflow between systems, people, and devices. It increases the efficiency of business rules and frees the employees from non-value add tasks to focus on creating more strategic and personalized customer interactions with data-powered insights. Leveraging all digital touchpoints across the customer journey is our way in. It is essential to gauge customer expectations accurately to understand what they want. The best companies invest in tools such as advanced analytics to access robust qualitative data, create simulations and understand the impact of their potential investments. This necessity could be the cue to look for partnerships with technical giants with proven expertise in managing digital algorithms and prescriptive/ predictive analytics. But is all this honestly translating into superior customer experience? Let us understand with an example. A customer can be availing services in a bank or interacting with an insurer. Organizations can enable these touchpoints with conversational AI engagement tools, such as chatbots and virtual voice-enabled assistants. When implemented right, they can give contextual insights to help customers make wiser and better decisions. The catch is to 'implement it right.' We have to think like customers, understand their journeys and ensure that the latest technology only adds value to improve their experience. Humanizing technology means making technology better able to easily interpret and react to human factors, such as human emotions. When designing AI-powered interfaces, we should move beyond pure functionality and consider ergonomics and softer aesthetics to ensure human-like, pleasurable interactions with the customers. So, what happens next? Well, growth happens! When organizations invest in humanizing their technical architecture to improve customer experience and employee experience, they become three times more productive than those who do not. Humanized technology can help organizations learn about customer journeys and behaviors and offer a digital-yet-personalized engagement. With centralized customer information portals and virtual bots acting as front-liners, customer care executives can be freed of menial non-value tasks and focus on more value-add work. They can draw insights from customers' last purchases or open tickets in the CRMs and make strategic and contextual conversations to delight customers at the end of each cycle. 88% of marketers revealed this in a global survey focused on delivering agile customer service. The recipe for humanized customer experience includes having a richer and more tech-powered understanding of the emotions of our employees and customers. Leaders have to leverage internal feedback and pursue a customer-centric attitude across their organizations. Thanks for reading this blog. I have spoken more about why improving CX depends on humanizing tech here. Industry: Jasjit Singh Kang SVP & Business Head: Digital Operations & Platforms(DOP)-iCORE, Wipro Limited Jasjit leads global delivery for Wipro HR Services, Healthcare and BFSI. He is responsible for client relationships,

operations and growth for these practices. With over 28 years of experience, Jasjit has worked in the areas of operations management, technology based innovation, business development and relationship management. Despite the long-standing history of private pension plans, superannuation was introduced to Australians over 20 years ago to help them support their retirement in a financially viable way. Fast forward to 2020; it is now a A\$3T business. Over the last two decades, superannuation has become complex, highly regulated, and vulnerable to scandals. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just neglected www.wipro.com/blogs/manoj-santhakumar/ ---- Contact Wipro Blogs By Author Strategy for Transforming the Payments Estate for the Future Please fill the required details to access the content Manoj Santhakumar Manoj Santhakumar Partner, Digital Architecture & Consulting Manoj is an architecture and strategy advisory consultant with a breadth of experience covering areas like consulting, architecture, program strategy and solution delivery for banking customers. He has been involved with multiple customers for defining their payments architecture and transformation roadmap. His core technology focus area is digital transformation in the areas of integration, Cloud-native architectures, App modernization and DevOps. The payments industry is under significant disruption across the world driven by changing customer demands, regulatory influences, new business models and the advent of innovative new players in the market. The traditional banks are still grappling with inherent challenges of the legacy application landscape that lacks flexibility and agility to change leading to a high cost of ownership and cost of change.

## Strategy for Transforming the Payments Estate for the Future

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new industry regulations and compete in the competitive marketplace. However, most are struggling to define an approach to take on this complex transformation. And while regulatory compliance is a central focus for banks, the key objective for a transformation should be to build flexibility and scalability for any future needs, rather than building point solutions for regulatory adherence. Architecture Transformation Considerations - Why Transform? Traditional Banks are challenged on two fronts. On one hand, the changing customer expectations and the entry of innovative players in the market are driving them to be highly competitive to stay relevant. On the other hand, new regulations are striving for changes that promote more competition and collaboration in the ecosystem. As a result, payment platforms and associated architecture within banks are expected to be highly flexible and scalable than ever before. Re-architecting the payments application landscape is an opportunity to re-assess the challenges with current systems and processes and redesign them for future use. There are essential considerations to keep in mind when defining the new architecture to meet industry demands. These considerations include flexibility for change, agility for change, resilience by design, scalable on-demand, standards oriented and incorporating data-driven insights. Following a structured transformation methodology can ensure that all these considerations are addressed in the new architecture. Recommended Methodology for Transformation Given the unifying trends across the globe, the architecture transformation for payments will typically center around the following key pillars: Based on Wipro's interactions and engagements with multiple customers, following the methodology below can simplify the approach to payments architecture transformation in a structured manner while keeping these important pillars in focus. 1. Defining Business Outcomes The first step in the process is to define the business outcomes. Some of the typical areas of transformation include: If possible, bring in an outside perspective to avoid the pitfall of building the current process on the new tech stack. It is important to understand the new digital bank's customer/colleague journeys to understand the feasibility and future possibilities and this is usually best accomplished with an outside perspective. 2. Current State Assessment While it may be tempting to jump right in and define the target state, it is critical to understand the current state landscape, to ensure the best results. Payment value-chain (segregating as Payments Initiation, Payment Execution, Settlement and Reconciliation, Customer Support, etc.) is a good method to categorize the functionality, systems, workflows and provide a common understanding between business and IT. This analysis should ask detailed questions like what the different types of channels and customer types are, what systems are involved, what is the purpose of each system and what data reports are needed. 3.Defining Target State Architecture The third step is to define the target state architecture. While the target state architecture will depend on the scope and scale of the transformation, for best results address the four areas outlined below. a) Formation of product domains As previously mentioned, one of the main pitfalls while defining target architecture is that many organizations end up rebuilding their current state architecture with new products and technology stacks. The goal should be to address current challenges and redefine architecture for the future. The best way to accomplish this goal is a top-down approach. Apply domain-driven design and product-oriented thinking and reclassify the payments estate as a set of

loosely coupled service domains. b)Addressing payments hub/engine While most payment transformations focus on the adoption of a new payment engine, it is equally important to take a broader view of the Payment Engine (PE) product strategy while selecting the PE. Some of the key criteria to assess when selecting a payment engine vendor include: c)Addressing the integration challenge While the major focus of an organization is selecting a new payment engine, it is equally important to address the complexity of periphery system integration. In some cases, payment engines (COTS products) do not offer open standards-based APIs/interfaces and are not flexible for customized integrations. Ignoring this complexity results in spending more on system integration. d)Addressing data strategy Data is the new lever for a competitive edge in the market. Payment transaction data is a valuable source of information to drive intelligent insights into customer spending behavior, patterns, etc. Unfortunately, most legacy systems have siloed data that do not allow rich, real-time, easily accessible information. Develop a data strategy that includes the quality of data and availability of real-time access to information needs in the target architecture. A view of the current and future data consumption use cases upfront will help to define the right data strategy for payments. Many payment transformations will address centralizing the data lake with real-time payments information utilizing event-driven architecture. e)Addressing operations Payment operations is a critical function as it handles business-critical processes of the organization. It is important to address payment operations requirements as a precursor to transformation. Consider including transparent operations based on real-time dashboards, predictive and proactive issue resolutions with AIOps, inherent focus on resilience by design by leveraging new technology capabilities like auto-healing, selfrecovery, etc. and new ways of working by adopting methods like SRE models. Benefits of Transforming Payments Architecture While addressing industry pressures that are pushing banks to transform their payments architecture, in conversations with our customers, Wipro has identified a common set of business drivers that are contributing to the conversation on payments transformation. The strategy outlined above is based on an analysis of multiple customer landscapes. It provides a methodology to approach this complex transformation systematically and provide positive outcomes for large banks to target a resilient, flexible, scalable payments platform for the future. Industry: Manoj Santhakumar Partner, Digital Architecture & Consulting Manoj is an architecture and strategy advisory consultant with a breadth of experience covering areas like consulting, architecture, program strategy and solution delivery for banking customers. He has been involved with multiple customers for defining their payments architecture and transformation roadmap. His core technology focus area is digital transformation in the areas of integration, Cloud-native architectures, App modernization and DevOps. India's payment journey has changed significantly over time. What started as a barter system has evolved into cashless payments Migrating your data and services to a public cloud service like Google Cloud offers multiple advantages, including increased flexibility and agility.... Traditional banks are reinventing themselves to meet ----- Arcticle source ----- https://www.wipro.com/blogs/jamie-lanz/ ----- Contact Wipro Blogs By Author Top 3 Salesforce Field Service Enhancements for Resource Management Please fill the required details to access the content

#### Top 3 Salesforce Field Service Enhancements for Resource Management

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Candidates Have gaps in your shift schedule and need to find particular types of workers to fill those shifts quickly? New updates to the Get Candidates section allows shift managers to more easily find and assign a service resource. Shift managers can create a balanced shift schedule by using rules that take into account factors like preferred working hours. Save Time with Mass Shift Updates Whether shifts change due to seasonality, or major organizational changes occurs, it is important for shift managers to make substantial changes in one action instead of the monotonous task of updating each employee's shift schedule. Shift managers can now update shifts in bulk by creating a background task that assigns agents, updates shift statuses, or both on a batch of shifts. 3. Better Employee Experience: A More Secure and Balanced Mobile Workforce Limit Nonstandard Shifts and Boost Team's Work-Life Balance It is understood that some tasks are more tedious or labor intensive than others. To avoid employee burnout, it is important that the more laborious tasks be dispersed evenly. To make sharing the workload a bit easier, shift managers can see at a glance which shifts are inconvenient or undesirable by marking shifts as nonstandard using a red icon. Shift managers can also create scheduling rules and constraints that limit how many nonstandard shifts are assigned to service resources, helping shift managers schedule equitably and improve their team's well-being. Create Recurring Absences for Service Resources Shift managers often struggle with finding the best way to track recurring absences in the workforce. Whether planned time off or an unplanned life event, it is important to manage schedules quickly and easily. Shift managers can save time by scheduling a set of routine absences for vour mobile worker, such as a meeting or recurring medical appointment. Create absences that recur on a daily, weekly, or monthly schedule. Tighten Service Resources' Security by Hiding Their Location Having the ability to decide who can see where a mobile worker is at any given moment during a shift is a game changer, not just for the company, but the mobile worker as well. Fine-tune privacy protection by controlling who can see the whereabouts of mobile workers, and assign permissions to hide live positions and actual routes from the dispatcher console and resource maps. Source: https:// help.salesforce.com/s/articleView?id=release-

notes.salesforce release notes.htm&type=5&release=236&language=en US Contact us at wsp-cloud@wipro.com to get started. Industry: Jamie Lanz Jamie Lanz is a Global Go-To-Market Manager for the Wipro Salesforce Practice with over 7 years of experience working in the manufacturing industry with a strong focus on dealer networks. Along with over 12 years of experience working in sales and marketing roles. Jamie has served as a Senior Salesforce Administrator, implementing enterprise solutions and change management across several different business lines. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

#### Augmented Reality Transforms Facility Operations and Improves Business Continuity

----- Arcticle source ----- https://www.wipro.com/blogs/anu-pillai-s/augmentedreality-transforms-facility-operations-and-improves-business-continuity/-----About the Author Contact Wipro Related Blogs Relevance of Intellectual Property for Startups 5 Ways Airports Can Leverage Technology to Emerge Stronger from COVID-19 Impact Please fill the required details to access the content Augmented Reality Transforms Facility Operations and Improves Business Continuity April | 2022 Facility owners and operators are rapidly digitizing their physical space to improve the utilization and availability of systems and eliminate downtime. But there are others areas to use new technology to realize gains. Facility operations, maintenance managers and field teams perform numerous designed inspections and assessments to ensure business continuity and improve enterprise resilience. Even with Industry IoT and smart systems in place, several tasks demand a hands-on, labour-intensive approach - people to physically inspect, monitor and maintain plants or in-the-field assets like transmission lines and energy systems. If routine maintenance checks are not performed on time, it could result in costly downtime of equipment. These delays impact not just the facility employee productivity but can also impact business outcomes. Many of these operations, compliance and regulatory norms can benefit greatly from augmented reality (AR) and automation. Augmented Reality to Digitize the Built-in Area Many buildings, assets and operation management systems are designed to manage the processes and systems of a facility. What these systems do not provide is other critical information related to precise equipment location, guided navigation, operating manual, issue logs and historical patterns. Superimposing a computer-generated model in the real world is a core feature of AR. Further, AR if crafted correctly, can help replicate the kind of service that Google or Apple map apps provide for the public - it provides valuable location services for each piece of equipment. How Does AR Help? Typically, floor plans are displayed in a 2-D format across critical locations in a facility as part of an emergency exit plan. However, built-in environments operate in closed, restricted spaces making them inaccessible for any satellite or GPS-based positioning services. Insider

Navigation, a new age augmented reality platform, digitizes a built-in space by plotting coordinates (x, y, z) generated from the computer vision system to the floor plan. The physical space or an asset in a facility is mapped to its relative 3-D coordinates just like a meeting room location or product aisle in a large warehouse. The platform then renders the layout and defines its walls and routes making spaces interactive. The interactive platform provides employees seamless guided navigation to equipment like fire extinguishers, heavy machinery, storage tanks, etc. using a smartphone, headgear or using industry rugged devices compatible with AR core as a feature. Embracing new technologies, particularly AR, can improve the facility management function and can lead to even greater gains in productivity, continuity, resilience, and safety. Common Use Cases for AR in Facility Management A specific example of how AR can improve building resiliency is by automating routine equipment checks. Traditionally, a routine check of important equipment and systems involves physical inspection and recording of data on a pre-printed paper. An effective approach is to leverage AR for a digitized representation of the facility with precise location-tagging of assets. This significantly reduces ambiguity about where to go or what to do next. An AR-based approach to facilities or operations management can also be integrated into existing asset management systems like SAP, Infor, Maximo and Salesforce to automatically retrieve data that contributes to the health of all assets, including defect management tools like ServiceNow to report issues and schedule repairs. There are a variety of potential use cases for this kind of mobile-centric, AR-based system that can be deployed in any asset-heavy, process-oriented, regulatory compliant enterprise. Many companies are using automation and new-age technology like AR to improve their business processes. But facility management and maintenance improvements should not be overlooked. AR and automation can significantly extend benefits in many areas including health and safety, employee/consumer experience, regulatory compliance, locating assets, maintenance, logistics, warehouse and many more. Employing new technologies in facility management can lead to actionable insights that provide measurable gains in productivity, continuity, resilience and safety. Industry: Anu Pillai S Digital Transformation Leader, COE, Wipro Limited Anu Pillai S leads the Center of Excellence and Smart Infrastructure at Wipro's Engineering, Construction, Operations and Airports practice (part of the Domain and Consulting group). He works closely with clients to reimagine customer journeys by bringing together industry process, design and next-gen technology. He has worked with leading organizations globally on consulting, innovation and business transformation engagements. This paper presents an analysis of startups in the digital technology domain from the perspective of the World IP Day 2021 theme, "IP & SMEs: Taking your ideas to market". As per World Intellectual Property Organization (WIPO) this theme represents "Critical role of small and medium-sized enterprises (SMEs) in the economy and how they can use intellectual property (IP) rights to build stronger, more competitive and resilient businesses". These are turbulent times. Airports can rise to the challenges of this crisis and turn it into an opportunity by focusing on the long-term strategic perspective and embracing innovation.

 

## Data: A Strategic Asset Enabling Value Creation for Insurers

---- Arcticle source ---- https://www.wipro.com/blogs/suzanne-j-dann/data-astrategic-asset-enabling-value-creation-for-insurers/ ---- About the Author Contact Wipro Related Blogs Why Cyber Resilience Depends on Trust and Information Sharing Leading the Path to Recovery and Resilience AI IN DIGITAL LENDING Please fill the required details to access the content Data: A Strategic Asset Enabling Value Creation for Insurers March | 2023 The insurance industry has traditionally relied on data sources such as claims history to underwrite known and measurable risk. A new wave of global challenges - financial crises, economic uncertainty, geopolitical shifts, and climate change - has introduced an elevated level of risk exposure in the insurance industry. These new risks are less predictable and difficult to quantify, and include factors like inflation, supply chain disruption, accelerating cyber-attacks, an abrupt restructuring of business models, extreme weather, increased litigations, the rise of the gig workforce, new regulations, and changing consumer behavior. Figure 1: New and changing risks faced by insurers. Source: Wipro Insights Analysis To tackle these rapidly evolving risks, insurers require a comprehensive and dynamic analysis of the economy, market, and several other risk-generating parameters. This dynamic analysis substitutes static assumptions with datadriven, real-time knowledge, and generates actionable insights that insurers can leverage to mitigate risk. Data is the cornerstone strategic asset in conducting this dynamic analysis. It is imperative that insurers harness their data to remain customer-centric, drive new products, and achieve competitive advantage. However, it can be difficult for established insurers to transform into data-centric, data-driven organizations. The primary challenge is collecting relevant data in real time, and storing it in an enriched, structured format. Legacy systems, aging infrastructure, and inhouse talent constraints further exacerbate the challenges faced by insurers. Furthermore, the benefits of moving toward a more data-driven approach are never immediate, and require a long-term ROI perspective that can be difficult to maintain when budgets are squeezed. Adopting a holistic data framework to address data-related challenges A holistic approach is required to implement end-to-end data transformation and gain agility, efficiency, and automation across the insurance value chain. This can be achieved by deploying/modernizing a four-stage data framework that considers how to source, structure, store, and synthesize data (see Figures 2 and 3). Sourcing: Insurers will drive greater value and insight if they can leverage data from both internal and new external sources. For instance, they can source data generated in real time by connected IoT devices such as smart watches, vehicle telematics, and industrial IoT sensors, as well as by drones and satellites. Moreover, insurers also have large volumes of internal data, generated over time but buried in departmental silos, which could be further leveraged through operational integration across verticals. Combining internal data with data from new sources is a strategy that can act as a force multiplier in delivering a remarkable competitive edge. Structuring: The large volumes of data collected across internal and new sources come in different formats and require structuring to be rendered usable. It is vital for insurers to have effective structuring tools and platforms in place, as this will determine the quality of data, thus directly impacting the accuracy of insights and outcomes. Storing: Storing data on cloud servers and integrating it with other insurance operations is key for effective data transformation. While the cloud had become widely leveraged by insurers to store and retrieve data, only a limited number of insurers have integrated data from across functions. Moreover, many have not fully integrated the cloud with their operations and have not fully leveraged the potential of cloud for data transformation. Synthesizing: In the end, value is derived from effectively synthesizing data. Data processing technologies such as advance analytics, AI/ML, cloud computing, and blockchain will equip insurers with the capability to effectively analyze data and derive actionable insights. Figure 3: Value propositions of the data: 4S Framework Source: Wipro Insights Analysis With a holistic data ecosystem in place, insurers will begin to unlock the full value of advanced data-driven operations. Data use cases: How data can create value and impart a competitive edge Underwriting automation: While insurers will continue to manually underwrite complex, high-value risks, they can already automate the underwriting of simple risks by leveraging data and straight-through engines to enable real-time risk assessment. Automation enhances the customer experience by accelerating processing times, while also resulting in operational cost efficiencies. For instance, we have seen a commercial insurer leverage multi-source data and apply advance analytics to process more than 15% of its new business through automated systems, thus strengthening its position in the commercial segment. In another case, a life insurer reduced underwriting expenses by up to 20% by adopting datadriven automated underwriting. Loss prevention and fraud detection: Realtime data from IoT devices enables insurers to continuously monitor customer risk exposure and adopt preventive modelling to notify them before the occurrence of loss. Moreover, in cases of loss occurrence, IoT data plays a significant role in conducting accurate loss assessment and quick claims settlements. For instance, we have seen a midsized insurer leverage IoT data to avoid property losses due to frozen pipe leaks, reducing

its loss ratio by more than 4%. Similarly, another midsized insurer that offers policies to restaurants used IoT sensor data to trigger preventive measures when electrical outages threatened to spoil refrigerated goods. A large personal lines insurer, meanwhile, is leveraging data from social media to identify fraud, and several commercial insurers have already deployed drones and satellite imagery to estimate catastrophe losses and crop damage. Profitability: Insurers can also leverage data to lower their risk exposure and increase profitability through simple behavioral nudges. One life insurer is extensively using health-related data collected from smart watches to track customer health risks and then reward them for adopting healthy lifestyle choices. Several motor insurers have begun linking driving behavior with premiums, thus nudging customers to follow safe driving practices to earn discounts and rewards. Claims digitalization and automation: Increasingly, data-driven core platforms will enable insurers to fully automate most low-complexity claims, particularly in their personal lines. An end-to-end touchless claims journey will begin when the end customer uploads imagery and proof of damages through an app, while image recognition and AI/ML will be used to assess damages, identify a repair provider and schedule a repair. More broadly, algorithm-based claims segmentation will separate automatable claims from claims that require hands-on adjuster attention. Furthermore, the role of the adjuster will shift, which will require significant talent transformation. As adjusters become more data-driven and iterative, they will leverage advanced datamanagement skills (rather than process-related skills) to efficiently handle Conclusion: Transforming into a dynamic, data-driven insurance organization is critical to 21st century success While the COVID-19 pandemic was a shock to the system for insurers, the waning of the pandemic is not bringing a return to business as usual. Some of the changes in market dynamics and consumer behavior that were triggered by the pandemic are becoming permanent, and new global risks are impacting insurance underwriting and business models. Considering this backdrop, it is crucial for insurers to integrate a comprehensive data framework and strategy into their business models, making themselves future-ready and able to confront an evolving risk landscape. Data practices will become even more critical as trends like embedded insurance become more pervasive. Data security, privacy and access - as well as data portability and consent management - will become defining areas for building customer trust as sensitive data is shared and stored within extended enterprise ecosystems. The insurers that harness the full potential of data will be able to tackle the emerging risks and gain a durable competitive edge over insurers that lag in data adoption. Companies slow to adopt new data practices are certain to face sustainability challenges and gradually lose market share, not only to efficient data-driven incumbents, but also to agile new entrants who are eager to capture their own share of the 21st century insurance market. Industry: Suzanne J. Dann CEO - Americas 2 Suzanne Dann is Wipro's CEO for the Americas 2 region and is also a member of the Wipro Executive Board. She leads the Financial Services, Manufacturing, Energy and Utilities, and Hi-Tech sectors, as well as Wipro in Canada. With over 25 years of experience in consulting and technology services, Suzanne has held multiple leadership positions at both IBM and Avanade. She joined Wipro in April 2021 as the Senior Vice President of Capital Markets and Insurance, successfully leveraging her deep industry expertise to deliver growth and

build a high-performing team committed to client success. Suzanne also serves as the Executive Sponsor for Americas 2 Diversity and Inclusion initiatives. Suzanne holds a B.S. degree in Engineering from Cornell University and a CISSP. She currently resides in New Jersey with her husband and their two children. In her free time she enjoys hiking, golf, and traveling with her family. In the early stages of the pandemic, the sudden shift to remote work triggered a flood of cybersecurity threats. Of the nearly 200 organizations surveyed in Wipro's upcoming State of Cybersecurity Report 2020, the majority (70%) report challenges maintaining endpoint security. Phishing scams spiked; 73% of organizations cite them as their top security threat. Not all companies were born digital, but they must now adapt to the digital demands of our world's current situation. As the wave of COVID-19 traverses across the world, business resilience has emerged as a strategic avenue. Banks/NBFCs (Lenders) and other traditional lending financial institutions find themselves operating in times where it is all about how well they know their customers, and how they can use this knowledge Arcticle source ---- https://www.wipro.com/blogs/tushar-sharma/ ---- Contact Wipro Blogs By Author All about NIGO (Not In Good Order) Insurance Service Forms Please fill the required details to access the content Tushar Sharma Tushar Sharma Practice Lead (Solutions and Consulting), Life & Annuity, iCORE, DOP, Wipro Tushar has been working in the Life Insurance industry across geographies for over 18 years. He has worked in advisory and delivery roles to drive operational and digital transformation and contact center/service center transformation strategy. Before joining Wipro, Tushar worked with MetLife, IBM, ICICI Prudential Life, and Capgemini. When a customer uploads an outdated version of forms or ones with missing signatures, the agents experience an interrupted workflow because they have to re-evaluate these forms for the accuracy of the seeded information.

## All about NIGO (Not In Good Order) Insurance Service Forms

----- Arcticle source ----- https://www.wipro.com/blogs/tushar-sharma/all-about-not-in-good-order-insurance-service-forms/ ----- About the Author(s) Contact Wipro Related Blogs Data: A Strategic Asset Enabling Value Creation for Insurers What Banks Need to Know About Nordic Cross Border Payments or P27 Insurance - Renewed focus emerging from the pandemic Please fill the required details to access the content All about NIGO (Not In Good Order) Insurance Service Forms May | 2022 When a customer uploads an outdated version of forms or ones with missing signatures, the agents experience an interrupted workflow because they have to re-evaluate these forms for the accuracy of the seeded information. Such paperwork errors can affect productivity and company ROI. Why? Because claims or applications featuring Not In Good Order (NIGO) documents halt form processing and place a premium on agents to manually chase their applicants to fix these errors, leading to inevitable business costs. Policy servicing and catering to various change requests often involve processing

multiple manual forms, letters, and other correspondence in traditional insurers. As per available data, 40% of these documents include errors leading to NIGO forms that disrupt workflows, causing SLA breach, TAT nonadherence, and other compliance issues. Insurance carriers have no choice but to seek more information from the customer to address NIGO issues, increasing the cost of per-policy servicing. The main scenarios for NIGO errors are: A significant number of customers of traditional carriers are not aware of the process of policy service requests. As a result, customers prefer to talk to their agents/field representatives and get their requests processed directly. This forces agents/field representatives to spend a significant amount of time addressing customer issues and initiating such reguests. Often they turn to the customer representative (contact center) to address complex requests on behalf of their customers. Customers often do not receive adequate help or are unaware of the assist features required to ensure that the forms are error-free. They seek extensive support from customer representatives on even simple requests leading to repeat queries, error-prone requests, and a negative customer journey. Social media is full of such examples of customers venting their displeasure at the complexity of processes and lack of information. Explaining the problem While creating a significant impact on the field and customer representatives, both the above scenarios also generate negative customer experiences due to the complexity of the process. It makes potential new customers think of perceptional inefficiencies, which affect the entire insurance value chain. Interrupted workflows →Longer wait times for customers → Poor employee experience →Decreased business productivity → Decreased customer satisfaction → Lower CSAT and NPS score The current proliferation of many small to medium-sized form systems indicates that life insurance carriers have failed to integrate and have not realized the benefits of end-toend transformation levers. These repetitive, transactional activities also affect operational scalability and the ability to respond to seasonal spikes in policyholder requests in an agile manner. Decoding the solution Insurers need to realize that NIGO issues are part of a bigger problem that a limited reactive approach will not sort. They need to look at building a mature capability that has: Since NIGO is one of the prime reasons for the high cost of policy servicing, insurance carriers should not settle for NIGO document processing as an unavoidable operating cost. They need to look at it as an opportunity for operating cost reduction, customer satisfaction, customer retention, and employee productivity. Insurance carriers must partner with players who have the right capabilities and understanding to balance realtime assistance and automation needs. The partner should align to the business outcomes expected by the insurance company that removes NIGO errors. A fruitful partnership will balance customer and employee experience and help create sustained business value. The proliferation of exponential technologies demands a constant rethinking of the competitiveness of each value chain component. Removing NIGO issues would have a cascading effect on key business capabilities for insurance carriers. Insurers must realize that averaging the cost of transactions across capabilities is no longer a competitive play. Insurers must consider minimizing NIGO forms as the key to better customer experience, operational efficiency, and future-proofing the workforce. Industry: Tushar Sharma Practice Lead (Solutions and Consulting), Life & Annuity, iCORE, DOP, Wipro Tushar has been working in the Life Insurance industry across

geographies for over 18 years. He has worked in advisory and delivery roles to drive operational and digital transformation and contact center/service center transformation strategy. Before joining Wipro, Tushar worked with MetLife, IBM, ICICI Prudential Life, and Capgemini. Kanika Anand Manager, Life & Annuity, iCORE, DOP, Wipro Kanika has over ten years of experience in the Insurance Domain. She analyzes business problems and presents automated solutions/recommendations for complete business processes in her current role. She has previously worked as a Product Owner and a Project Manager on New Business and Policy Admin systems. The insurance industry has tradionally relied on data sources such as claims history to underwrite known and measurable risk. While P27 is expected to bring many efficiencies to the payments system in the Nordic region, participating banks will need to take deliberate steps to prepare for this new platform. The insurance industry has responded well to the COVID-19 outbreak through managing business continuity and supporting its source ---- https://www.wipro.com/blogs/abraham-orden/ ---- Contact Wipro Blogs By Author Risk in the ESG Age Please fill the required details to access the content Abraham Orden Abraham Orden Global Business Manager - Strategy and Risk at Wipro Cybersecurity and Risk Services Abraham leads Wipro's ESG Risk Advisory and Solutions practice. The ESG risk practice leverages 20+ years of governance, risk management, and compliance experience. We help enterprises enhance responsible conduct and eliminate business drag as they respond to ESG regulations globally by applying learnings and best practices from Sarbanes Oxley, GDPR and other epochal regulatory regimes. A tidal wave of ESG regulations is looming across markets. To prepare, companies are shifting responsibility for sustainability management and reporting to the risk management domain. Risk executives are investing in enhancing their governance, risk management, and compliance (GRC) systems to account for ESG factors. ===============

#### Risk in the ESG Age

----- Arcticle source ----- https://www.wipro.com/blogs/abraham-orden/newtechnology-and-advisory-solutions-are-helping-companies-prepare-forforthcoming-regulations-by-integrating-esg-into-risk-management/ ---- About the Author(s) Contact Wipro Related Blogs Exchange of Cyber Threat Intelligence Among Peers Using Decentralized Identity Networks and IoFT Cybersecurity through collaboration Detective and Preventive controls for cyber-attacks like Solorigate with IAM tools Please fill the required details to access the content Risk in the ESG Age New technology and advisory solutions are helping companies prepare for forthcoming regulations by integrating ESG into risk management. May | 2022 Summary A tidal wave of ESG regulations is looming across markets. To prepare, companies are shifting responsibility for sustainability management and reporting to the risk management domain. Risk executives are investing in enhancing their governance, risk management, and compliance (GRC) systems to account for ESG factors. GRC strategy consultants, software providers, and systems integrators are responding with investments and innovations that increase

the business value created by managing ESG risks with their solutions. Risk in the ESG Age Today, a company's sustainability performance and disclosures across ESG—environmental, social, and corporate governance matters—has a direct bearing on its cost of capital and its cost of doing business. Investors, customers, employees, and even suppliers expect and reward new levels of transparency from the companies with which they deal. As a result, tremendous investments have been made by companies across industries and geographies recently in strengthening sustainability management and reporting with sustainability teams, sustainability board committees, and publicly declared sustainability goals. Yet sustainability reporting today is a voluntary exercise. Accountability is minimal. And the risks of misstatement are purely reputational in nature. All of this is changing, as a tidal wave of ESG regulation enters into force over the course of 2023-24. Regulators across jurisdictions have taken note of the value of sustainability disclosure, and they are moving en masse to mandate what and how companies report on the sustainability of their business activities across ESG. Globally, more than 750 ESG policy interventions have been made, with more than 100 initiated in 2021 alone. (Source Regulation database). The most robust regulations are centered in the EU, such as the Corporate Sustainability Reporting Directive, or CSRD. But in the US as well, the Securities and Exchange Commission has declared its intention to regulate disclosure on four identified ESG pillars, and has already accepted a proposal to require climate impact disclosures in financial reporting. ESG reporting becomes a mandatory set of disclosures made on the public record, ESG performance expands from a source of competitive advantage with investors and customers to become a fundamental requirement of maintaining a license to operate from market regulators. The most sweeping regulations, such as the EU's CSRD, begin to move ESG towards parity with financial accountability and include audit requirements; their enforcement mechanisms indicate that sustainability disclosures are evolving into a new source of regulatory and legal risk. To thrive when transitioning from voluntary to mandatory—risky—sustainability reporting, companies need to successfully marry their sustainability capabilities to their risk management and compliance capabilities. And most are starting. At the board level, just over half of companies are currently incorporating ESG into their integrated risk management planning. (Source: Sustainability in the Spotlight). At the executive level, leaders are proactively taking action to ensure they are presenting reliable ESG data, with 9 out of 10 of respondents to a recent Deloitte survey confirming that their organization will invest in enhancing its ESG control environment. (Source: Enhanced Climate Disclosures). Risk and compliance leaders who are beginning to evaluate how to deploy those investments should look to their CISOs and the IT Governance, Risk Management, and Compliance domain, or GRC. GRC for ESG As an IT security system in which governance, risk, and compliance are conceived and managed in terms of data, GRC has much of the people, processes, and technology already in place to readily incorporate sustainability metrics into the risk management and compliance domains. Indeed, many extant regulations that are already being managed within GRC, such as protections for human rights and the environment, now fall under the ESG umbrella. Leveraging existing GRC infrastructure to tackle ESG compliance is a way to accelerate the journey to ESG risk maturity, while also increasing the return on previously made investments. Furthermore, solution providers within the

GRC ecosystem have already recognized the opportunity to create more business value for customers by adapting GRC to manage compliance with the new ESG regulations. These players are investing with gusto, in a race to bring solutions to market that answer customer's evolving needs with ever greater fidelity. Strategy and risk consultants, for example, are rethinking their core set of GRC advisory tools to incorporate ESG. The refreshed perspectives give insight into enterprise sustainability risk posture, and include tools such as audit, assessment, and change management frameworks, maturity models, and reporting dashboards. At the software level, the commitments from risk management platform providers couldn't be greater, with several dedicating themselves to strategies in which sustainability and ESG become the dominant risk management theme for their customers. Each of the leading risk management SaaS platforms has launched their own new ESG products since late 2021. The ESG solutions integrate ESG factors into core risk management, while also catering to the unique challenges and opportunities of sustainability performance management and reporting at both the enterprise and line of business levels. Iteration and development will continue apace in this arena, and accelerate further as customer adoption grows. As companies begin to purchase these new applications and adapt them to their environments, GRC systems integrators are mastering them and innovating new solutions to solve for unique customer needs, challenges, and opportunities. As they do so, they create unique IP that opens new possibilities for insight and automation with the core platforms on the one hand, and foster an infrastructure that promotes interoperability and holistic management on the other. Industry: Abraham Orden Global Business Manager - Strategy and Risk at Wipro Cybersecurity and Risk Services Abraham leads Wipro's ESG Risk Advisory and Solutions practice. The ESG risk practice leverages 20+ years of governance, risk management, and compliance experience. We help enterprises enhance responsible conduct and eliminate business drag as they respond to ESG regulations globally by applying learnings and best practices from Sarbanes Oxley, GDPR and other epochal regulatory regimes. Ramkumar Narayanan Global Head - Governance, Risk, and Compliance practices at Wipro Cybersecurity and Risk Services As global head of GRC, Ram oversees a practice of more than one thousand consultants across all geographies, serving over three hundred clients in IT GRC, Privacy, Third Party Risk Management, and ESG risk. Ramkumar has over twenty-five years of experience in IT risk management and has been leading global teams at Wipro for more than fifteen years. The ability to exchange cyber threat intelligence (CTI) in privacy preserving and in a secure manner is vital for enterprises to manage their security risks effectively. During the pandemic, dependence on digital technologies has seen unprecedented growth. From managing remote workforces to catering for changing customer expectations, the paradigm shift towards digital has brought a host of security challenges. The cybersecurity industry was deeply shaken by the Solorigate attack, the impact of which is still being felt in the cybersecurity space. Several companies have already started addressing this challenge with their product www.wipro.com/blogs/mital-shah/ ---- Contact Wipro Blogs By Author How leveraging a digital adoption solution can help reinforce the assurance of quality Please fill the required details to access the content Mital Shah Mital

## How leveraging a digital adoption solution can help reinforce the assurance of quality

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line if not done right. Human errors cause financial losses and result in poor customer experience, reputational damage, lower share price or money, and time spent responding to regulators. Various issues can directly or indirectly cause human errors: How can technology reduce errors? How do we minimize errors and achieve operational efficiency? Accelerating quality management capabilities involves replacing expensive and poor quality control mechanisms with solutions that increase quality assurance and reduce the spending on quality. To achieve this, we can either automate manual processes to accomplish accuracy or prevent humans from making mistakes. Process automation by leveraging robotics and workflow engines can replace manual processes that are standardized and repetitive. However, changing the propensity to commit human mistakes requires predictive analysis to identify the factors contributing to a higher likelihood of error. For example, at Wipro, we recently deployed a predictive analytics model to identify ~75% of the errors by merely selecting 30% of samples in one of our client's mortgage underwriting processes. We collected twentyseven parameters for 6787 loans processed and performed data cleansing with 2671 valid data points. The model clustered out the most likely factors to cause high critical errors. We then prompted the inputs to loan processors to work accordingly, thereby successfully reducing the critical errors from 5.6% to 1.4%. Unlock efficiencies with a digital adoption solution A "nocode" digital adoption solutionwhich can act as a realtime virtual SME can help users learn workflows and alert the agent in real-time to reduce the risk of human errors through various features like smart tips, auto-fill, flow automation etc. Let us explore some of the challenge scenarios to explore how this solution can resolve the issues: Challenges Features like self-help, task list, and pop-up can help newly onboarded users to learn in the workflow through engaging training content and knowledge-check guizzes. Expected benefit - Proficiency improvement by 1.25X-1.35X Beacons and pop-ups can make users aware of any newly added feature or application upgrade. Also, the in-app guidance can help users complete each step of a process. Expected benefit - Error reduction to up to 75% Outdated SOPs Interactive SOPs can guide users to complete the task step-by-step accurately. Expected benefit - Error reduction to up to 75%. Reduction in Average Handling Time (AHT) This platform can monitor users in real-time to check if any user skips a step/field or overrides the instructions. As a result, the process manager/OA can immediately nudge the user to correct the error. Expected benefit - Real-time monitoring With a feature like Smart Tips, the platform can help the user correct input information, reducing the chances of errors. It can also have an auto-fill feature to input pre-defined standard or critical data in specific fields. Expected benefit - 75% error reduction, improves user productivity by 25-37% This platform can run as an overlay on the underlying system and may not make changes or capture data from the underlying application. Moreover, the platform can work in an open ecosystem, which helps organizations seamlessly integrate their existing enterprise-level platforms. Expected benefit - No replacement, upgrade, or customization of legacy systems, No data leakage Timeconsuming enterprise approvals The platform can support cloud and onpremise deployment. Users will require a browser extension to install thirdparty vendor applications, generally pushed automatically by IT. Conclusion Human errors can prove to be really expensive. Did you know that in 2020, financial institutions took a hit of \$10.4 billion in global fines & penalties

related to AML, KYC, Data Privacy & MiFID (Markets in Financial Instruments Directive)? Most organizations have blamed technology & human errors for these heavy penalties. Also, one of the largest banks in the US paid \$900 million to lenders due to "human error." This is not all. From 2014-to 2019, 83 banks have reported 778,639 loss events, totaling a staggering amount of \$533 billion. Of all the factors that can adversely affect the cost of quality, operational errors pose the most significant risks. According to a report from IBM, bad data alone costs US businesses more than \$3.1 trillion a year. These issues can be human-driven, technologydriven, or beyond human or technological control. Whatever the type may be, we can reduce the impact of these errors on the cost of quality by working on the factors within our control. Replacing your existing quality control processes with a digital adoption solution will offer both the analytics and a platform to help eliminate manual errors while optimizing costs. Improving quality, proficiency, productivity, and accuracy with a digital mechanism will also ensure process compliance, enabling businesses to improve efficiency, reduce operational costs and focus on growth. Industry: Mital Shah Leader, Change & Transformation, Wipro BFS Services Mital Shah has 15+ years of experience across SDLC phases for multiple Banking & Financial services(BFS) institute globally. Seasoned in solution design and implementing Business Transformation & Enterprise solutions across business operations & technology lifecycle. Over the last 4 years within Wipro, he has lead design, solution, and implementation of over 800+ digital bots, multiple products implementations, and setting up the Business Change & Transformation Practice; enabling significant value for our BFS customers globally. India's payment journey has changed significantly over time. What started as a barter system has evolved into cashless payments Migrating your data and services to a public cloud service like Google Cloud offers multiple advantages, including increased flexibility and agility.... Traditional banks are reinventing themselves to meet 

## Top 5 common pitfalls when implementing

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top-5-common-pitfalls-when-implementing-a-cpq-solution/ ---- About the
author Contact Wipro Please fill the required details to access the content
Top 5 common pitfalls when implementing a CPQ solution Configure, Price,
Quote (CPQ) is a technology that helps companies accurately configure,
price and quote their products and services more efficiently and with
greater accuracy so that their sales teams can focus on the business of
selling. Once in place, sales can be turned around faster, renewals and
renewal rates can be improved, pricing optimization can be enhanced, and
the sales teams can better manage the overall customer relationship. From a
profitability perspective, CPQ reduces errors and the time to sale, helping
businesses improve productivity across the board, reducing overall business
costs. To summarize, CPQ has the capability to help meet your productivity,
sales and operations goals while significantly increasing profitability.

However, while this type of metamorphic power is within reach, we should be aware that these are generally major transformational initiatives with a lot of moving parts. To ensure that you start off on the right foot, I recommend paying close attention to the following 5 things: Before jumping into the implementation phase of a transformational effort such as this, it is always very important to define how to measure success. This will not only be used at the end of the project to determine if the project goals have been achieved but it will also be used throughout the project to help keep things focused and on track by driving prioritization decisions. It is important that this whole process is started with a strategy phase of some kind where research into the wants and needs that will help define the problem has been completed and from this has emerged a vision. Along with this vision, there will be goals and objectives. Now during the implementation phase, we can align this next phase to the relevant goals and objectives and define specific KPIs to enable the measurement of success. Each associated KPI should be SMART (Specific, Measurable, Attainable, Realistic, and Timebase) and each KPI should be benchmarked prior to the start of this phase of the CPQ project. Examples of possible CPQ KPIs include: #2 Assuming it is all about the technology One challenge customers come up against is realizing that transformational change does not just come magically with a new technology. Transformational change is more than technology based. To achieve a successful business transformation, processes and organizational structure also need to be addressed. CPQ is critical in optimizing the customer experience and can enable greater productivity and efficiency, but this goes beyond CPQ technology and requires rethinking the processes as well. Businesses need to look internally and from a holistic perspective, at how they may need to re-engineer some of their processes and organizational structure to remove any and all non-value-added steps, such as optimizing the Sales and Ouoting processes or simplifying Legal & Contract processes. #3 Not taking the time to simplify & rationalize the different elements of CPQ In line with the above, it is important to re-assess some of the core elements that make up the foundation of the solution. These underlying components will be the key to ensuring the overall success of your future solution. Therefore, taking steps to do proper analysis and to align them with the company's future state vision is critical. A key goal should be to simplify and rationalize wherever possible. Keeping things simple makes it more likely to be able to keep things "out of the box". Staying as close to standard functionality as possible for your CPQ solution should be one of your top priorities. Below are some common examples of components to assess: It is very important to involve user teams starting at the very beginning of the process. Be sure to identify global/regional champions for each user group to lead the transformation. Yes - Sales is a major stakeholder/user of a CPQ solution, but many other teams are also impacted. They all must be represented, and it is essential to make sure you include checkpoint reviews with these champions throughout the project so that they can validate all assumptions at every phase. #5 Not having a comprehensive Data and Integrations Plan CPQ is a data heavy solution and as the saying goes "garbage in garbage out", so it is critical to make sure the data sources are defined, and the data model is well documented and the data itself is clean. There needs to be a Master Data Management plan that includes specification of the SSOT for all key data elements (such as Customer, Pricing, Product, etc.) All Integration touch points and hand-offs

need to be included with the data mapping logic and data integrity processes, rules and middle-ware controls (if required). CPO solutions are expected to integrate with front-end CRM and back-end ERP systems as well as many other supporting systems. The goal is to design your solution to do so seamlessly in order to optimize upstream, downstream and midstream processes simultaneously. Bottom Line It is evident that successfully implementing a CPQ solution consists of several moving parts and has several pitfalls that should be avoided. There is, however, a way to ensure success of your efforts so long as you keep the below in mind. Get a functional view of Configure-Price-Quote (CPQ) and cognitive commerce, with Wipro & Apttus. Listen to our webinar on "Transformation towards digital and automated ordering process": Kathy Gilbert-O'Neil Global Practice Director-MAS Consulting | Wipro Limited Kathy brings over 20 years of experience in Consulting and Technology Transformation for Wipro's Modern Applications Consulting Division. She specializes in Consulting, Advisory, and Technology delivery. Kathy is adept at devising future strategy & IT competency roadmap for enterprise transformation with hands-on management style and deep focus on business analysis, solution blueprinting, process modeling, execution planning, and consensus www.wipro.com/blogs/dr-manish-govil/ ---- Contact Wipro Blogs By Author Conversational interfaces: The game changer for your customer experience Customer Experience Modernization Through Next Generation Contact Centers Freedom Unbound: Unleashing The Power Of Data Application Modernization - A Foundation To Accelerate Digital Transformation Transforming customer experience in student loan services through cloud modernization Please fill the required details to access the content Dr. Manish Govil Dr. Manish Govil Global AWS Practice Head at Wipro Dr. Manish Govil is the Global AWS Practice Head at Wipro. He is responsible for driving go-to-market solutions, competency, offerings, center of excellence and delivery for AWS-related services globally. Our expectations of the future have evolved from the language interprdetation and etiquette services of "C3PO" in Star Wars, to the emotional companionship of "Samantha" in Her. Today's new age customers have ushered in the need for redefined technology enhancements, that are all about conversational interfaces and AI (artificial intelligence) assisted services. On the operational level, traditional metrics continue to be driven by productivity, and finally, at the emotional needs level, there is a requirement to address the emotional quotient of both the customer and the agent. Dynamic market economics, shifting consumer patterns, and new-age digital native companies have driven the demand for data and insights. The Covid-19 pandemic came as a wakeup call for organizations to accelerate digital transformation. Enterprises acknowledged the need to digitally enable rapid innovation in developing and launching new business models and products, optimizing business processes Techonlogy applications used to perfromloan servicing functions for students were originally built on legacy platforms. For instance, mainframes used 4th Generation Languages (4GL) like Key and Netron, which generated the COBOL code.

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## Conversational interfaces: The game changer for your customer experience

----- Arcticle source ----- https://www.wipro.com/blogs/dr-manish-govil/ conversational-interfaces-the-game-changer-for-your-customer-experience/ ---- About the Author Contact Wipro Related Blogs Cloud Economics: Driving Business Value Through Discipline De-Risking Mainframe Modernization for the Banking Industry The Day After: De-risking Legacy Modernization Please fill the required details to access the content Conversational interfaces: The game changer for your customer experience Our expectations of the future have evolved from the language interpretation and etiquette services of "C3PO" in Star Wars, to the emotional companionship of "Samantha" in Her. While C3PO imitated human form, Samantha has no form at all. While C3PO followed instructions (with some comic banter thrown in), Samantha can perceive the environment, sense the emotions within, and have discussions with humans, just like a human being. Emotional intelligence of computers may be relegated to the realm of science fiction for some time to come, but the ability for them to interact with humans is here and now. Conversational interaction through voice is one such area that is seeing rapid adoption as a form of leveraging computers. Computer and human voice interaction is one of those rare technologies that both Baby Boomers and Millennials are attracted to. The aging Boomers find voice much easier than computer screen interactions, while Millennials have little love for the interaction preferences of their parents. Several advances have made natural interaction with computers possible 1 — the first of which is voice recognition. Amazon Alexa (with its far field recognition) has changed the game in conversational interactions. You are no longer tethered to your computer or phone. Noise reduction, echo cancellation, and its ability to distinguish between the relevant voice and ambient sounds means that one can interact with Alexa from across the room. The second technology-related advance is the ability to flawlessly match the signal captured to a word in a language, while also accounting for accents and dialects. While you and I could pronounce the word "orange" differently, the computer would still capture it as the same word. Once the voice has been recognized, it has to be interpreted, which is in the realm of natural language processing. The system needs to understand the instruction being given — at first literally, and then contextually. Significant advances have been made recently in this area through the field of Deep Learning. While constructs such as machine learning and neural networks have been around since the 1960s, the computational power of the cloud, and the ability to give systems enough data to draw meaningful correlations and conclusions, has exploded over the past few years. Deep Learning makes it possible to train the system to understand the intent of the speaker and respond to it2. Systems are now able to understand higher level intent of a request and fill in implicit information on its own, without needing step by step instructions to

deconstruct the request. A number of platforms are masking these complexities and making simple, high-level developmental tools available to developers to leverage this power. Customer-oriented Digital Assistants (like Alexa) are taking most of the limelight. But for enterprises to leverage the true power of conversational interactions, we have to go a little towards Skynet territory3. No, we don't want systems to take over and run the planet for us. But for accomplishing any meaningful task beyond searching the web or playing music, the conversational interaction paradigm has to be inserted in applications at the Application Programming Interface (API) layer. Smart applications should be able to interact with one another through APIs. This would include interactions like exchanging data, providing answers to queries, executing tasks requested by other authorized applications, providing the results on the completion of the task, initiating requests with other applications if needed, and more. They should accomplish this without the need for an individual to interact with multiple systems. This has a significant positive impact on productivity of workers and customers. The savings from reduced learning time, interaction time, computation time, and even licensing costs can be significant. Conversational interfaces can take your customer experience to the next level. References 1 - https:// www.forbes.com/sites/bernardmarr/2016/12/08/what-is-the-differencebetween-deep-learning-machine-learning-and-ai/#4198f29a26cf 2 - https:// www.technologyreview.com/s/513696/deep-learning/ 3- https:// en.wikipedia.org/wiki/Skynet (Terminator) Industry: Dr. Manish Govil Global AWS Practice Head at Wipro He is responsible for driving go-tomarket solutions, competency, offerings, center of excellence and delivery for AWS-related services globally. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business 

# Transforming customer experience in student loan services through cloud modernization

---- Arcticle source ---- https://www.wipro.com/blogs/dr-manish-govil/ transforming-customer-experience-in-student-loan-services-through-cloudmodernization/ ---- About the Author(s) Contact Wipro Please fill the required details to access the content Transforming customer experience in student loan services through cloud modernization February | 2021 Technology applications used to perform loan servicing functions for students were originally built on legacy platforms. For instance, mainframes used 4th Generation Languages (4GL) like Key and Netron, which generated the COBOL code. Today, most of these code generators are being retired. For the CIO / CBO, these platforms pose multiple challenges including: lack of scalability, high cost of product changes, and inability to provide customer insights which result in a loss of customers and brand reputation due to poor customer servicing. These challenges result in an even higher impact on some specific use cases, e.g., loan servicing for students financing their higher education. The topline of this industry is heavily dependent on customer experience for its business growth. The bottom line, on the other hand, depends largely on the "cost to serve." Organizations need to embark on a digital transformation journey to thrive in the student loan servicing business which requires the ability to both increase customer acquisition and reduce the "cost to serve" through the development of a platform that supports agility and flexibility. Digital transformation is not an easy journey. It involves complex makeovers from architecture to business processes, including: Wipro has been part of digital transformation journeys for multiple customers. One such unique example is migration of the legacy mainframe-based loan servicing platform to AWS for PHEAA (Pennsylvania Higher Education Assistance Agency), a leading student aid organization. PHEAA (https://www.pheaa.org/) is a national provider of student financial aid services, serving millions of students, and thousands of schools, through its loan servicing, loan guarantee, financial aid processing, outreach, and other student aid programs and services. PHEAA chose AWS as the cloud platform for its digital transformation due to its extensive cloud services portfolio, scalability, integrated DevSecOps approach, and secured infrastructure. During this transformation, the organization is targeting to realize the following benefits: Dr. Manish Govil General Manager & Global AWS Practice Head (manish.govil1@wipro.com) He is responsible for driving go-to-market solutions, competency, offerings, center of excellence, and delivery for AWS-related services globally. Sachin Iain Global Account Executive for PHEAA ==============

## Application Modernization - A Foundation To Accelerate Digital Transformation

----- Arcticle source ----- https://www.wipro.com/blogs/dr-manish-govil/application-modernizationa-foundation-to-accelerate-digital-transformation/----- About the Author Contact Wipro Please fill the required details to access the content Application Modernization – A Foundation To Accelerate Digital Transformation April | 2021 The Covid-19 pandemic came as a wakeup call for organizations to accelerate digital transformation. Enterprises acknowledged the need to digitally enable rapid innovation in developing and launching new business models and products, optimizing business

processes, and responding to new requirements of both external and internal stakeholders. Organizations that are digital natives were able to adapt to the changing business scenario quickly in the COVID-19 era. 74% of large organizations realized the imperative to modernize their enterprise IT systems to drive digital transformation. Modernization is no longer optional. Without digitization, enterprises will face many challenges and risks. Some of these risks include a poor brand image, a loss of market share, vulnerability to competition, and an inability to attract good talent. Cloud has become the most important enabler to drive this system modernization imperative. Everything about systems and applications is evolving at a rapid pace - be it modern architectures - including microservices, serverless; modern development processes - DevSecOps, CI/ CD; modern infrastructure - including containers, infrastructure as code, site reliability engineering (SRE), and chaos engineering. Cloud providers like Amazon Web Services (AWS) are at the forefront of providing the building blocks of technology in all these areas. Following are some patterns which drive customers to modernize: By implementing the above patterns to modernize their IT estate, customers have been able to achieve the following benefits: Application modernization powered by cloud capabilities is a powerful strategy for businesses as they look to increase agility, accelerate innovation, and reduce the total cost of ownership and unwanted technical Dr. Manish Govil Global AWS Practice Head at Wipro Dr. Manish Govil is the Global AWS Practice Head at Wipro. He is responsible for driving go-to-market solutions, competency, offerings, center of excellence and delivery for AWS-related services globally.

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## Freedom Unbound: Unleashing The Power Of Data

----- Arcticle source ----- https://www.wipro.com/blogs/dr-manish-govil/ freedom-unbound-unleashing-the-power-of-data/ ---- About the Author Contact Wipro Please fill the required details to access the content Freedom Unbound: Unleashing The Power Of Data April | 2021 The need for data has never been greater than it is today. Dynamic market economics, shifting consumer patterns, and new-age digital native companies have driven the demand for data and insights. Increasingly, the data divide has taken on a new meaning between the haves and the have nots. Organizations that are on the right side of the data maturity curve have recalibrated their supply lines, customer services, and cash flows by tapping into data insights. The pandemic has further accelerated data and digital transformation. Grocery retailers for instance are tapping into data & analytics to discover new shopping behaviors, increase regional sourcing, adjusting store planograms, reducing SKU assortments while reorienting their workforce. The story has however, been remarkably different for organizations that look to make decisions with limited visibility of the mostly uncharted data within enterprise silos. This leads to the principal question: How do you unlock the hidden potential of data assets? Our customer interactions have resulted in some insights on this topic. Business leaders unanimously agree on the need for organizations to: They have, however, called out a few roadblocks for organizations to truly transform into intelligent enterprises. These start with defining a plan to: Driving a mind shift toward a data-driven culture requires an appreciation of the multiple levels of consumption maturity within an organization. These, typically, include the need for: 1. Fundamental visibility and intelligence on core business operations: 2. Finding the right question to ask using AI/ML 3. Monetizing data to build new revenue streams Servicing the consumption needs within an enterprise requires setting up secure and robust data foundations that can scale. This has been the chief catalyst to move legacy enterprise databases, and onpremise data platforms to the cloud. Native platform-as-a-service capability of cloud platforms like Amazon Web Services begin to play a significant role here. In summary, organizations need to consider building strong data foundations that can cater to multiple levels of consumption maturity while addressing traditional data ownership and stewardship challenges. Manish Govil Global AWS Practice Head at Wipro Dr. Manish Govil is the Global AWS Practice Head at Wipro. He is responsible for driving go-tomarket solutions, competency, offerings, center of excellence and delivery 

#### Customer Experience Modernization Through Next Generation Contact Centers

----- Arcticle source ----- https://www.wipro.com/blogs/dr-manish-govil/ customer-experience-modernization-through-next-generation-contactcenters/ ---- About the Author Contact Wipro Please fill the required details to access the content Customer Experience Modernization Through Next Generation Contact Centers April | 2021 Today's new age customers have ushered in the need for redefined technology enhancements, that are all about conversational interfaces and AI (artificial intelligence) assisted services. On the operational level, traditional metrics continue to be driven by productivity, and finally, at the emotional needs level, there is a requirement to address the emotional quotient of both the customer and the agent. Digital consumers want to use all available channels as they interact with the services of a brand. And they want to do so seamlessly, without losing context, as they move from one channel to another. Given these complex requirements, it is critical that we address customer experience requirements on multiple fronts. Hence our approach cuts across the following components: Design - Technology - People and Process - Data and Analytics We fit everything together to drive end to end transformation through our contact center on the cloud, powered by Amazon connect. Most enterprises offer multiple channels of interactions and have invested significantly in a plethora of systems. However, we still find that: So if the problem is clear, why are organizations not able to meet these expectations? Several challenges contribute towards this: So what should be the next step? It is necessary to step back and look at three streams: The first is to reimagine customer interaction. Second, start executing on this reimagined

journey by reinforcing it with systems that align with your roadmap: Finally, there is the pillar of resiliency. Our biggest learning from the Covid-19 pandemic has been to build nimble and future ready architecture. It should be able to scale up or down without putting stress on resources or budgets. It should be able to plug and play easily with third party solutions, to take advantage of the innovation that the ecosystem brings. Also, special attention should be paid to service continuity, in case of physical and system disruptions. To conclude, we always have to look at the intersection of Design - Technology - Business operations, in order to learn from each aspect, and to create a resilient and personalized contact center that satisfies not just the customer but also the agents, to provide a superior experience episode everytime. Dr. Manish Govil Global AWS Practice Head at Wipro Dr. Manish Govil is the Global AWS Practice Head at Wipro. He is responsible for driving go-to-market solutions, competency, offerings, center of excellence and delivery for AWS-related services globally. www.wipro.com/blogs/karl-veidis/ ---- Contact Wipro Blogs By Author Obsolescence in hardware and software. The mandate for a move to cloud? Please fill the required details to access the content Karl Veidis Karl Veidis Partner for Cloud Consulting Karl Veidis is a Partner for Cloud Consulting in the USA. Karl is a member of the global cloud consulting partner team focused on Energy, Manufacturing and Technology verticals. Karl works with different clients throughout North America to understand their business needs and help them set technology strategy and direction. With a particular focus on clients who wish to re-gear their IT Organization and Business Services within the context overall of IT-aaS and Cloud, Karl helps frame the vision and define the architecture of their new cloud-enabled enterprise. Do you have End of Life (EOL) software in use at your organization? 

## Obsolescence in hardware and software.

#### The mandate for a move to cloud?

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the required details to access the content Obsolescence in hardware and
software. The mandate for a move to cloud? September | 2019 The article
discusses: Do you have End of Life (EOL) software in use at your
organization? Very few organizations don't have at least some sort of
technical debt. Often it's looked at from an infrastructure point of view with
hardware because it has a date of acquisition. But software ages in exactly
the same way. And some of the impacts of software ageing are larger and of
greater risk to an organization than hardware. Custom applications are

software too. We all know about planned EOL dates for large vendors such as Microsoft, but don't forget your internal applications. They have even greater risks usually through staff attrition, lack of documentation, and lost tribal knowledge. Smaller software companies often go bankrupt. What do you do then? What exactly is EOL for a custom app? I have found this demonstrated to me at many of the clients I have worked with over the years and in this post, I will speak about a Financial Services company that had a number of issues come together. The following characteristics existed in this financial services company's application environment: What existed in their landscape was a brittle application set with poor application architecture and development staff who knew that no one could validate when they said. How long would it take to code something? Two days or two weeks, the answer would depend on the developer's mood at the time. Would it be tested fully? Development practices were old and stale with multiple repositories, manual code promotion and no documentation of any kind. And what about the data? Were there risks in how it was managed? Yes, there certainly was. So let's start there. The risks in data management As technology permeates every aspect of our lives, an ever-increasing stream of information about individuals is generated, gathered, and tracked. This Personably Identifiable Information(PII), unique data that helps identify an individual, needs to be handled and stored with a focus on data privacy. It's in an organization's best interest in keeping the PII they collect and maintain fully secure. Government regulations such as the European GDPR mandates organizations to comply with safe methods of data collection and storage. When PII data is stored on EOL systems such as databases, there exists a high potential for exposure. If the data was not encrypted at rest because of poor application design; or constraints from the past that required data such as Social Security Numbers to be stored as open text, then you are just at the beginning of the problem statement. Has that data been archived over time into many, many copies? Are there test environments that hold multiple copies of the same PII data? If data sprawl is an issue because departments are too afraid to delete anything, your risk may be 100 times bigger than you ever expected. This was the case at this particular organization. Your exposure to that risk of attack needs to be quantified. A general rule of thumb currently states that a copy of each instance of a complete set of PII is the equivalent of \$200 worth of exposure to the organization holding it. Doesn't sound like much? Do you have a million customer records? That's 200 million in exposure. How many database servers have an active copy? Production for sure, then BI reporting, billing, CRM? What about testing copies? Whichever way you add up the numbers, you are exposed to significant risks. The solution. Move to cloud? The solution for the financial services company was to move to the cloud. And transform along the way. It would be via a combination of lift and shift to IaaS and transformation to PaaS based solutions. Testing practices needed to become more comprehensive. Development processes would need to be changed. All new software would be designed to be cloud native. But did they have to move to the cloud? Were there options to remain onpremise? Yes there was. To solve the data problems, it was possible to implement Transparent Data Encryption at the database level to remove security exposures. But that did not solve the EOL problems. In fact, it would prolong them. Performance could have been improved on-premise with new hardware. But buying newer hardware would lock the company

into another extended stay in their own data center. Having their own data center, which was actually just a sophisticated computer room being run by a large IT staff meant more of the same costs would continue. A lot of the work could be achieved in the cloud in an automated way thereby reducing staffing overheads, but new hardware reduced this ability to adopt new practices. New software could be written to take advantage of new hardware performance but if not supported by new development practices, and especially on-demand testing capability, old practices would continue. A move to the cloud was essential! Making the move to cloud The financial institution understood that changes would need to be managed in what was going to be both, a technological and cultural set of changes. People, Process and Tools would be affected. A program of work and suitable owners of all work streams were assigned and leadership gave a cloud-first mandate. The following steps were taken: To conclude The net result was an organization that fit the template of a cloud-centric approach and all of the benefits. Agility was increased in terms of software development and deployment. Disaster recovery and business continuity were enhanced. Testing was improved via automation and the ability to run performance testing on equivalent compute capacity. Data security was improved and therefore, risk was reduced. The cultural impacts were felt in terms of greater communication between stakeholders across IT and the business and sense of 'team' and common goals was amplified. And financially, many costs were reduced whilst the visibility of the consumption of resources was increased. Obsolescence was the driver to bring about change in this organization but it could well have been data security or hardware refresh cycles. Cloud-based services are the most effective in combating all these kinds of problems. Industry: A tidal wave of ESG regulations is looming across markets. To prepare, companies are shifting responsibility for sustainability management and reporting to the risk management domain. Risk executives are investing in enhancing their governance, risk management, and compliance (GRC) systems to account for ESG factors. The ability to exchange cyber threat intelligence (CTI) in privacy preserving and in a secure manner is vital for enterprises to manage their security risks effectively. During the pandemic, dependence on digital technologies has seen unprecedented growth. From managing remote workforces to catering for changing customer expectations, the paradigm shift towards digital has Arcticle source ---- https://www.wipro.com/blogs/bhagirath-gopinath/ -----Contact Wipro Blogs By Author Digital Workspace: Accelerating Molecule to Market Please fill the required details to access the content Bhagirath Gopinath Bhagirath Gopinath Enterprise Architect Bhagirath Gopinath (Gopi) is an Enterprise Architect with 18 year's experience. In his current role, Gopi focuses on Life Sciences and works with clients in the adoption of Cloud Platforms. He has been championing Digital First Architecture styles for building next-generation platforms. He has also been working on solution themes to build future Smart Applications covering all architecture layers. Pharmaceutical companies aim to address their requirements around disease-focused early stage drug development

#### **Digital Workspace:**

#### Accelerating Molecule to Market

----- Arcticle source ----- https://www.wipro.com/blogs/bhagirath-gopinath/ digital-workspace-accelerating-molecule-to-market/---- About the Author Contact Wipro Related Blogs Cloud Economics: Driving Business Value Through Discipline De-Risking Mainframe Modernization for the Banking Industry The Day After: De-risking Legacy Modernization Please fill the required details to access the content Digital Workspace: Accelerating Molecule to Market September | 2019 Pharmaceutical companies aim to address their requirements around disease-focused early stage drug development, market-focused mid-stage drug development, Health Economic Outcomes Research, and safety-focused late stage processes leveraging the right methods and technology. Leading pharmaceutical companies such as Takeda are embracing digital transformation to help bring the right tools to their business users. Research and Development of a drug goes through a long and expensive lifecycle from basic research to preclinical and clinical. This includes rigorous regulatory compliance. Having the relevant information available to the research teams is critical to enable faster molecule to market. This is enabled by deploying critical platforms and applications such a slab-information management systems, clinical trials management systems, pharmacovigilance platforms and, research informatics application in a fast and efficient way. It is also crucial to have the right means to scale these deployments on demand. Desktop-as-aservice (DaaS) focuses on solutions for the digital workplace. These platforms empower users with a self-service portal that brings speed and agility to application access and real-time desktop management along with a reduction in storage costs and improvement in hardware utilization. Building a digital workspace for agile pharma R&D Desktop-as-a-service, a form of virtual desktop infrastructure (VDI), simplifies desktop operations, enhances security, ensures regulatory compliance, and makes applications and data available anytime, anywhere and on any device. By delivering speed and agility to virtual desktop and application management, DaaS helps pharma companies achieve workplace transformation, leading to efficient and agile drug development. Cost effectiveness One of the key benefits of virtual desktops, compared to traditional workstations, is that DaaS can dramatically reduce the total cost ownership. DaaS can reduce hardware capital expenditure annually, and also reduce the operating expenditure annually. Better security and compliance The problem with personal computers in a business environment is that they can be hacked, lost or stolen. Virtual desktops address this issue guite simply. If there is no sensitive information stored on any hard drive, or if there is no hard drive at all, as is the case with most thin client hardware, there is nothing to steal. Mobility With a virtual desktop, you can access your complete personal PC desktop experience from anywhere, using any device, including iPads, Macbooks, tablets and other mobile devices, as well as your existing desktops, laptops and thin clients. Flexibility Virtual desktops are

implemented and scaled guickly. Deployment of new software, applications, and updates takes minutes instead of days. Virtual desktop service can remove application compatibility issues with all applications running on all systems. Digital Workspace succeeds in: Making the digital journey with VirtuaDesk on AWS Wipro's Desktop-as-a-Service, known as VirtuaDesk™, focuses on solutions for the digital workplace. It enables enterprises to build a collaborative and mobile workforce by securing, provisioning, and sharing applications and data. This complete desktop virtualization solution helps pharma companies drive digital transformation. AWS provides robust scaling capabilities and quick turnaround for setting up the virtual desktop infrastructure and delivering the DaaS solutions to the business users for a fast and flawless experience. Figure 1 shows a general architecture representation for Wipro's DaaS on AWS. Figure 1: Wipro's Desktop-as-a-Service on AWS To know how you can accelerate your drug development timeline with VirtuaDesk™ on AWS, click here Industry: Bhagirath Gopinath Enterprise Architect Bhagirath Gopinath (Gopi) is an Enterprise Architect with 18 years' experience. In his current role, Gopi focuses on Life Sciences and works with clients in the adoption of cloud platforms. He has been championing Digital First Architecture styles for building next-generation platforms. He has also been working on solution themes to build future smart applications covering all architecture layers. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business Arcticle source ----- https://www.wipro.com/blogs/rajiv-kumar/ ----- Contact Wipro Blogs By Author A Smarter Way to Collaborate and Build Applications with Azure DevOps Advantage Containerization 8 reasons why enterprises choose Docker Get the intelligent edge with Azure Stack Please fill the required details to access the content Rajiv Kumar Rajiv has about 21 years of experience in the IT Industry. He has played a key role in developing nextgeneration transformative offerings like Azure Stack and rapidly growing the cloud practice across global geographies. He is a member of the Association of Enterprise Architects. He has many leading certificationslike TOGAF, Azure MCSD and AWS Solution Architect, among others. You can reach him at rajiv.kumar@wipro.com In a world where business is evolving at the speed of thought, rapidly changing market conditions pose several challenges for enterprises across industries. In a rapidly changing business environment, cloud services support the development of efficient, scalable and high-performance applications with minimal investment. Organizations are increasingly adopting cloud-first strategies, and this is understandable, given that the benefits of the cloud are plenty and hence, hard to ignore.

### Get the intelligent edge with Azure Stack

----- Arcticle source ----- https://www.wipro.com/blogs/rajiv-kumar/get-theintelligent-edge-with-azure-stack/ ----- About the Author Contact Wipro Related Blogs Optimizing Field services Through AR Transforming the leaveof-absence experience into an employee-retention tool A Smarter Way to Collaborate and Build Applications with Azure DevOps Please fill the required details to access the content Get the intelligent edge with Azure Stack September | 2019 Gartner estimates that worldwide public cloud services revenue will total to US\$ 314.3 billion in 2019, up 17.5 percent from last year1. Organizations are increasingly adopting cloud-first strategies, and this is understandable, given that the benefits of the cloud are plenty and hence, hard to ignore. Anytime access to data on the cloud, great agility and flexibility in data management, easy scalability of systems to keep pace with growing requirements and changing computing standards, quick maintenance and support - these are just some of the salient benefits that organizations enjoy when they transition to public cloud platforms. Recent years have also witnessed substantial growth in the private cloud platform segment. Wikibon projects that the worldwide True Private Cloud (TPC) market will experience a compounded annual growth rate of 29.2 percent2. While private cloud does offer all the benefits of public cloud and more, it, unfortunately, comes at a cost with huge investments on hardware technology and lacks the scalability that public cloud offers of utilizing resources on-demand. Furthermore, organizations lack the bandwidth to onboard and maintain dedicated IT expertise that private cloud computing and maintenance demands. Building a platform-asa-service (PaaS) model on-premise is both expensive and tedious. In recent years, hybrid cloud computing offers a combination of public and private cloud advantages, allowing companies to host workloads on public and private cloud based on compliance and regulation requirements while leveraging agility and speed. However, it has been observed that there are plenty of large organizations who are unable to reap the full benefits of cloud computing due to stringent privacy, security and regulatory compliance and related governance issues. For instance, financial institutions and research organizations cannot take sensitive data and applications onto public cloud domain due to privacy and data protection issues. There are also latency and connectivity issues that hinder journey to the public cloud. Some other organizations are unwilling to place core functions outside of their corporate data center on external compute and storage assets. For yet others, there are varying customized and nonstandard solution requirements that are difficult to support with the existing solutions available and using in-house expertise. However, all of these organizations need to scale and respond to dynamic digital transformation and cloud computing needs. They have a pressing requirement for increased flexibility to keep pace with an agile marketplace. The paradigm of edge computing on the cloud The answer lies in intelligent edge on Microsoft's Azure Stack cloud solution. Sold as an integrated system of software

solutions with validated on-premise hardware-in-a-box, Azure Stack provides a great on-premises cloud platform that includes all Azure cloud characteristics and offerings. It is an extension of Azure, offering the same codebase, allowing Microsoft to extend the learning, capabilities and features from Azure public cloud to private cloud. Azure Stack is a seamless integration of the local enterprise data center and public cloud, enabling companies to capitalize on the benefits of both public and private cloud offerings. Azure Stack is a seamless integration of the local enterprise data center and public cloud, enabling companies to capitalize on the benefits of both public and private cloud offerings. Intelligent Edge is an extension of Azure and helps bring to on-premise environments the same cloud applications and advantages, helping companies address privacy and compliance issues. Intelligent edge on Azure Stack integrates several products including Azure IoT Edge, Azure Stack, Azure Sphere, and Azure Data Box Edge. The platform enables consistency, agility, ease of operations and innovation that characterize cloud computing. It helps organizations leverage Azure services with the perfect balance of flexibility and control an optimal equation for sustained and consistent hybrid cloud deployment. The salient feature solutions of the Azure Stack are: Closing note As enterprises step up to the journey of digital transformation, it's very important for them to understand their current state of application readiness aligning to new business imperatives. This will help them evaluate and maximize their intended business benefits with intelligent edge on Azure stack. To know how we can help you leverage the best of intelligent edge with Azure Stack, click here. Reference 1 -https://www.gartner.com/en/ newsroom/press-releases/2019-04-02-gartner-forecasts-worldwide-publiccloud-revenue-to-g 2 -https://www.forbes.com/sites/louiscolumbus/ 2018/09/23/roundup-of-cloud-computing-forecasts-and-marketestimates-2018/#587005d4507b Industry: Rajiv Kumar Head - Azure Cloud, Cloud & Infrastructure Services, Wipro Rajiv has about 21 years of experience in the IT Industry. He has played a key role in developing nextgeneration transformative offerings like Azure Stack and rapidly growing the cloud practice across global geographies. He is a member of the Association of Enterprise Architects. He has many leading certificationslike TOGAF, Azure MCSD and AWS Solution Architect, among others. You can reach him at rajiv.kumar@wipro.com In the evolving landscape of digital workplaces, efficient field service operations are critical in ensuring reduced downtime... appy employees usually stay at their jobs, frustrated workers often don't. Chief human resource officers (CHROs) tell us that the corporate leave of absence (LOA) process is one of the most common sources of employee frustration. Employees often rank their LOA experiences low on the satisfaction scale, using descriptors such as complicated, confusing, inconsistent, time consuming, and unresolved. In a world where business is evolving at the speed of thought, rapidly changing market conditions pose several challenges for enterprises across industries.

#### **Advantage Containerization**

### 8 reasons why enterprises choose Docker

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Docker states that its enterprise customers routinely experience significant OPEX and CAPEX savings. Let us understand how by looking deeper at some of the advantages that come with leveraging this solution. Optimizing on Docker Containerization will power the future of technology, no doubt. However, organizations must study their business case in-depth and strategize to work around potential security and data management concerns even as they embark on their containerization strategy. Focus must not only be on monitoring the physical host containers but also on the applications loaded on these containers. Enterprises must also pay due attention to the management of the container lifecycle and orchestration of containers, which requires considerable container management capability and expertise. A continuous framework to maintain all aspects of the container ecosystem is pertinent. References 1 - https://www.gartner.com/ smarterwithgartner/6-best-practices-for-creating-a-container-platformstrategy/ Industry: Rajiv Kumar Head - Azure Cloud, Cloud & Infrastructure Services, Wipro Rajiv has around 21 years of experience in the IT Industry. He has played a key role in developing next-generation transformative offerings like Azure Stack. He is a member of Association of Enterprise Architects. He has many leading certification like TOGAF, Azure MCSD and AWS Solution Architect. You can reach him at rajiv.kumar@wipro.com In the evolving landscape of digital workplaces, efficient field service operations are critical in ensuring reduced downtime... appy employees usually stay at their jobs, frustrated workers often don't. Chief human resource officers (CHROs) tell us that the corporate leave of absence (LOA) process is one of the most common sources of employee frustration. Employees often rank their LOA experiences low on the satisfaction scale, using descriptors such as complicated, confusing, inconsistent, time consuming, and unresolved. In a world where business is evolving at the speed of thought, rapidly changing market conditions pose several challenges for enterprises across industries.

#### A Smarter Way to Collaborate and Build Applications with Azure DevOps

----- Arcticle source ----- https://www.wipro.com/blogs/rajiv-kumar/a-smarter-way-to-collaborate-and-build-applications-with-azure-dev-ops/ ----- About the Author Contact Wipro Related Blogs Optimizing Field services Through AR Transforming the leave-of-absence experience into an employee-retention tool Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Please fill the required details to access the content A Smarter Way to Collaborate and Build Applications with Azure DevOps August | 2022 In a world where business is evolving at the speed of thought, rapidly changing market conditions pose several challenges for enterprises across industries. Firms need to deliver products and services at lightning speed, remain competitive in aggressive and divergent markets, garner profits, enhance revenues, adapt to changing market and customer requirements, comply with new regulations or laws, and still deliver

superior customer experiences every single time. Agility, experimentation and continuous innovation are today essential components to unravel new business value. No wonder then that organizations are increasingly relying on automation and digital technologies to meet these challenges successfully. They are looking for agility in operations, minimal human intervention, and reduction in errors. With over 90% of global organizations having a digital first strategy in place or have planned, digital transformation is inevitable. However, for digital transformation to be truly successful, organizations need to embrace the "digital" state not just technologically or operationally, but also culturally. It entails a wholesale reinvention of business processes, and this requires overhauling significant portions of their legacy IT estates. Businesses need to embrace a more modern-styled architecture approach to development and delivery. One that can support delivery at a robust yet differentiated pace across various organizational components and divisions, while enabling innovation and operational efficiency at scale and speed. This is what DevOps does. DevOps: Converging people, process and technology To understand how the DevOps framework or approach helps organizations deliver with agility, let's take a quick look into its evolution. Over the last two decades, application development was often looked at as a standalone process isolated from and misaligned with operations. Development and operations functions worked in silos and the continuous cycle of feedback and iterative improvement was missing. While the previously used Waterfall or Agile methods had their benefits, they were not without limitations. The Waterfall methodology was linear, where all requirements for the software development process had to be laid out at the outset without flexibility to change during the development phase. The advent of virtualization brought with it the more popular Agile methodology of development. This approach is more flexible, allows products to get to market faster and enables better communication. However, the inflexibility and the lack of structure in this methodology too render it unsuitable for many complex development teams. Moreover, this methodology entails breaking projects into smaller tasks to help deliver faster, incorporate feedback, and manage dependencies. It is not effective during the testing and deployment phases as the development, quality and operations teams continue to work in silos. Enter DevOps. The key motive behind DevOps is to break the silos between operations and development to enable rapid, automated and streamlined development processes—thus ensuring rapidity of release without compromising on quality. The emergence of cloud services has further accelerated the need for and adoption of DevOps. The cloud has enabled easy and cost-effective processes, which can be easily interlaced across different environments, platforms, or complete services. Modern techniques leveraged in the implementation of cloud services, such as micro-services and even serverless architectures, highlight the need for DevOps capabilities, both in terms of faster time-to-market and continued support. Stages of the DevOps lifecycle DevOps influences the application lifecycle throughout its plan, develop, test and deploy phases. Each phase relies on and is related to the others and are not role specific. At each stage, there are several third-party tools available in the market to execute the framework. Betting big with Azure DevOps Azure DevOps from Microsoft is a Software-as-a-Service (SaaS) platform that offers users an end-to-end DevOps toolchain to rapidly develop and deploy software. Azure DevOps is an integrated offering of

various services including Azure Pipelines, Azure Boards and Azure Repos, which includes cloud hosted private Git repository, Azure Artifacts and Azure Test Plans—all designed to provide the DevOps teams with powerful tools and enablers for rapid software development. Azure DevOps offers developers a host of features including continuous integration and deployment (CI/CD), superior dashboard control and configurable dashboard widgets, improved Git or distributed source control and Team Foundation Version Control (TFVC), advanced features to plan and track your work, integrated collaboration features, manual and exploratory testing options, and more. Key benefits of Azure DevOps include: How organizations are using Azure DevOps Azure DevOps provides developer services, enabling teams to plan work, collaborate on code development, and build and deploy applications. Its collaborative culture brings together developers, project managers, and contributors to develop software allowing organizations to create and improve products with greater agility. More importantly, Azure DevOps enables seamless application development. It has the capability to detect any challenges or bugs and supports collaboration with the developer in real-time. The platform offers several ways to arrest problems at every stage, ensuring continuous collaboration between the operations and developer teams. Through the various stages, Azure offers a variety of its own set of best-in-class tools. Infrastructure as code is another use case. In the past, deploying storage, backup, virtual machine, or an application required manual intervention by the software teams. With Azure DevOps, developers can leverage code with templates and then store in the Azure Repository. Every organization has its own set of compliance requirements and policies. For instance, an organization will define the devices to be used by employees, the operating systems, software, etc. These are then written into SOPs. With Azure DevOps, codes can be written to automate the compliance checks and alerts can be triggered for non-compliance. With the help of Azure DevOps tools, migrating applications to the public cloud can be done leveraging automation tools and retaining the integrity of the data. Wipro brings Azure DevOps to life Wipro's Azure DevOps practice blurs the distinction between development and operations so that businesses can effortlessly produce zero-defect code and high-quality systems. Our Microsoft end-to-end Azure DevOps capabilities help to set up automated pipelines to build, test and deploy software code to any platform. Wipro's engineering teams focus on implementing the customer's solutions with Azure DevOps capabilities. The Integrated Agile DevOps Platform, an end-toend integration framework for continuous delivery, makes DevOps adoption repeatable and reusable while increasing productivity by as much as 20%. Our DevOps service includes DevOps Lab for Hire, Assessment Toolkit, Training-as-a-Service and DevOps Consultancy, which cut adoption time by 90%. DevOps for the future The future of the DevOps framework is promising and there are many more practical applications each day. DevOps methodologies are also changing with new tools and technologies coming in. With a continuously shifting technology landscape, there is a need to change the workflows and tools of DevOps. As container-native and cloud applications become increasingly popular, newer and better tools will emerge. With these changes, developers will no longer be required to write code on their computers or install required tools. With a multi-cloud environment as a given, there is a need to create cloud native applications. The new platforms and tools, coupled with AI, ML and automation,

organizations can foster true innovation. To know more about the Wipro Azure solution, please get in touch with us at Azure-Marketing@wipro.com Rajiv Kumar GM & Presales Head - Cloud, Cloud & Infrastructure Services, Wipro Rajiv has about 23 years of experience in the IT Industry. He has played a crucial role in developing next-generation transformative offerings like Azure Stack and rapidly growing the cloud practice across geographies. He is a member of the Association of Enterprise Architects and has many leading certifications like TOGAF, Azure Cloud architect Expert, Google Professional architect and AWS Solution Architect. In the evolving landscape of digital workplaces, efficient field service operations are critical in ensuring reduced downtime... appy employees usually stay at their jobs, frustrated workers often don't. Chief human resource officers (CHROs) tell us that the corporate leave of absence (LOA) process is one of the most common sources of employee frustration. Employees often rank their LOA experiences low on the satisfaction scale, using descriptors such as complicated, confusing, inconsistent, time consuming, and unresolved. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices ----- Arcticle source ----- https://www.wipro.com/blogs/david-schneider/ -----Contact Wipro Blogs By Author The Future is Wearable: How Medical Devices are shaping Wellness Please fill the required details to access the content David Schneider David Schneider General Manager, Sales Life Sciences in North America, Wipro Limited David is an accomplished sales leader with deep experience in Life Sciences, Pharma, Bio Chemical and Medical Devices with a sustained record of success in exceeding plan and building cohesion in teams who execute with precision. At Wipro, He is proud to take you on your transformation journey to digital - offering Wipro's as-a-service solutions - with a common goal of delighting our new clients every day. Wearable technology is poised to change the way healthcare companies enhance lives of the patients, especially those with chronic conditions. The remote monitoring of patients and real-time access to health indicators will enable never-before speed of interventions and 

#### The Future is Wearable:

### How Medical Devices are shaping Wellness

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Employee Healthcare Benefits Please fill the required details to access the content The Future is Wearable: How Medical Devices are shaping Wellness October | 2019 Wearable technology is poised to change the way healthcare companies enhance lives of the patients, especially those with chronic conditions. The remote monitoring of patients and real-time access to health indicators will enable never-before speed of interventions and comprehensive management According to Markets and Markets, the global market for medical wearable devices is projected to reach \$12.1 billion by 2021, with the US representing the largest market worldwide. Wearable technologies enhance the healthcare system by aiding in the remote monitoring of patients and providing real-time access to health indicators, enabling guicker diagnosis and treatment. Especially for chronic conditions, it is poised to lower the cost of healthcare, reduce durations of hospital stays, and best of all, fewer visits to the doctor. Moreover, these technologies are unobtrusive, with features, such as wireless data transmission, real-time feedback and alerting mechanisms. The benefits actually extend far beyond the healthcare system, as patients are empowered to take control and monitor their own health. To be honest though, wearables have not yet come out of the realm of novelty - most have been restricted to the individual wellness and fitness market, and simple adoption of these devices into every day healthcare still evolving. To realize its promise, wearables will need to transition to a clinical setting that requires the passing of stringent regulatory processes and approvals, especially concerned with the type and quality of data they generate. To unlock true value for the patient, this data must be relevant and usable in a clinical setting. It will be interesting to look athow wearables will enable Remote Patient Monitoring (RPM) - a category that is expected to grow the fastest with the rise in the number of people with chronic medical conditions and increase in geriatric population. Mobile medical devices can perform routine tests to make data available to healthcare professionals in real time. Implementation of RPM can improve the management of chronic diseases by measuring critical risk indicators, such as glucose, blood pressure, etc. Diabetes: Diabetes isone of the biggest worldwide healthcare crises, affecting over 400mn people with 23mn of them in the US alone. Most diabetes patients do not recognize symptoms of their condition worsening and by the time they do, it is too late to make changes to their daily habits or lifestyle. This often results in serious complications or emergency hospitalization, both of which are avoidable if indicators like blood glucose levels could be monitored. RPM enables these early warning signs by electronically communicating indications to a healthcare professional and allows for pre-emptive action to be taken. This reduces the chances that the patient would need a follow up visit or hospital admission. Current technology uses a small needle-like prong—the equivalent of two human hairs—embedded just beneath the skin and checks blood sugar fluids every five minutes, 24 x 7. But the Holy Grailthat researchers are chasing is a sensor that monitors glucose without pricking the skin. Hypertension 'The Silent Killer' affects over 75mn people in the US alone, and about half of these people do not have their blood pressure under control. Uncontrolled high blood pressure increases the risk of serious health problems, including heart attack and stroke: all of which will require significant healthcare spends. The latest devices that remotely monitor blood pressure do it with a band or a bracelet to do the work of the cuff that does the job in a doctor's

clinic. A small squeeze transmits the systolic and diastolic readouts to a smart phone or a remote monitoring device. Detection of blood pressure fluctuations enables timely diagnosis. When combined with a smartphone app that a physican has access to, the wearable blood pressure cuff on highrisk patients can detect an abnormal reading and ensure that the they receive an intervention before it is too late. The platforms also facilitate twoway communication between the patient and their provider and handle insurance billing for its customers. Sleep Disorders: About 70 million Americans don't get a good night's sleep. Sleep disorders are fast becoming the focus of wellness efforts around the world as the medical fraternity addresses sleep disorders like insomnia, sleep apnoea, restless leg syndrome, and narcolepsy. While the complexity of a PolySomnoGram (PSG) is not replicable in a wearable setting, sleep scientists have come up with actigraphy, a far more portable method. It can be used to ascertain if the movements you make during sleep are normal or abnormal, and whether you're going into deep and restful sleep as a part of your nightly rest. Gartner predicts that by 2023, 60% of healthcare consumers in the U.S. will have access to and control of their health data using a technology of their own liking, and wearables will lead the charge. Healthcare companies are investing in a digital future, with a view to transforming the patient wellness journey. Wearable devices offer healthcare companies the unique position of being able to disruptively impact people's lives. I believe it is an opportunity for the taking, what do you think? Industry: David Schneider General Manager, Sales Life Sciences in North America, Wipro Limited David is an accomplished sales leader with deep experience in Life Sciences, Pharma, Bio Chemical and Medical Devices with a sustained record of success in exceeding plan and building cohesion in teams who execute with precision. At Wipro, He is proud to take you on your transformation journey to digital offering Wipro's as-a-service solutions - with a common goal of delighting our new clients every day. This year's event was the largest gathering in the history of the Medicaid Enterprise System Conference (MESC) according to the New England State Consortium Organization (NESCO), the organizers of the event. Label and artwork management in medical device companies are still seen as an afterthought and therefore, there is not enough concentration as well as investment in this area. However, with new updates such as traceability (UDI) and e-labeling, companies are compelled to invest time and money to be compliant on the regulations required. The employee healthcare benefits reckoning is here. The enduring impact of COVID-19 has converged with digital transformation - especially the accelerated advancement of data collection and analytics - to create sweeping changes in employee-employer relations. The chaotic pace of change in managing remote workforces and retaining top talent has placed an enormous strain on employers. Meeting bottom lines while addressing significant increases in employee healthcare costs and premiums can become an existential www.wipro.com/blogs/dana-r-wolfe/ ---- Contact Wipro Blogs By Author Why Risk Management is Key to Reaping the Rewards of Industry 4.0 Please fill the required details to access the content Dana R. Wolfe Dana R. Wolfe Senior consulting executive Dana R. Wolfe is a senior consulting executive with over 20 years of progressive leadership, sales excellence & domain expertise enabling his clients to achieve business transformation and growth through adoption of technology and better processes. His broad experience

## Why Risk Management is Key to Reaping

#### the Rewards of Industry 4.0

---- Arcticle source ---- https://www.wipro.com/blogs/dana-r-wolfe/why-riskmanagement-is-key-to-reaping-the-rewards-of-industry-4-0/---- About the Author Contact Wipro Please fill the required details to access the content Why Risk Management is Key to Reaping the Rewards of Industry 4.0 October | 2019 As we barrel forward into the digital age, technological change impacts every industry and transforms some entirely. Looking at manufacturing in particular, the rise of automation and connectivity in factories has led to what industry insiders have dubbed "Industry 4.0" or the Fourth Industrial Revolution. This momentous shift has only just begun. This new era of manufacturing is characterized by digitization on a massive scale, and most industry leaders agree that it's also filled with promise. To reap the rewards of Industry 4.0, though, manufacturers will face enormous short-term challenges. This could explain why so many organizations haven't invested proactively in disruptive technologies. Mass manufacturers have to maintain a focus on managing working capital effectively. Many are uncertain of how to predict the return on investment of modernizing plants, whether that's in the short term or over a longer period of time. However, those that have already embraced emerging technologies saw rewards. The World Economic Forum released a report last year showing that investments in artificial intelligence and the Internet of Things are allowing manufacturers to uncover new efficiencies tied to a range of industry metrics. Among others, metrics that could potentially be improved include days sales outstanding, overall throughput effectiveness, and on time in full, as well as the reduction of cost of goods sold and operating expenses and the improvement of both capital efficiency and cost-effective market reach. In most cases, this is more about optimization than invention. Most investments in emerging technologies — especially within manufacturing — are geared toward finding new efficiencies in existing systems. Digitization allows organizations to set better statistical inventory targets, continuously monitor realized service levels, and fine-tune targets dynamically. In turn, companies that have implemented it can improve their inventory management systems in a few ways: In nearly every case, leaders prioritize risk management — and rightfully so. A Risky Endeavor Anyone

looking to incorporate Industry 4.0 technologies should know that digital transformation doesn't come without risk — whether that's cybersecurity threats, expensive capital expenditures, or other issues. Leaders, then, should carefully consider the challenges it might present as well as the effects it could have on long-term sustainability. Smart factories, in particular, should be designed with a focus on interoperability, as this makes sure inputs work toward the desired outcomes. None of the technologies that make this shift possible work in a vacuum — and friction can certainly occur at the connection points. Sometimes, this is due to a lack of trust across different internal or external groups. The statistical track record shows that suppliers and companies usually perform as promised. But for that to happen, you need a degree of responsible freedom in information transparency and healthy data use. Manufacturers could aim to become comfortable with decentralized engineering processes and make better use of the cloud for insightful analytics. They might also have to turn to new techniques — crowdsourcing, for instance — to build useful data sets. Then, there's compliance. New data privacy legislation (e.g., the European Union General Data Protection Regulation) doesn't apply to behemoth technology companies alone. Authenticity and fraud detection might not sound industrial, per se, but it's important to consider these concepts to reap the benefits Industry 4.0 promises. After all, it's clear that failure to weigh the importance of compliance can result in potentially devastating consequences. Fortunately, manufacturers can handle the challenges that are sure to crop up by adhering to two guiding principles: Lay the groundwork for transformation before you prioritize it as a business objective, and view technology implementation as a necessary long-term investment. If you focus too much on short-term benefits — say, low-hanging fruit — you might miss the bigger picture and fail to tailor transformation to your organization. Make no mistake: The next industrial revolution will be hand you don't want to fall behind. Dana R. Wolfe Senior consulting executive Dana R. Wolfe is a senior consulting executive with over 20 years of progressive leadership, sales excellence & domain expertise enabling his clients to achieve business transformation and growth through adoption of technology and better processes. His broad experience and depth encompass multiple industries including manufacturing & high tech clients. Mr. Wolfe views technology from a business perspective, and as a means with which to enable businesses to leverage technology to increase shareholder value. These results include the streamlining of costs to enable IT to become more agile, lean and competitive, and supporting the businesses core competencies. You can connect with him at https:// Arcticle source ---- https://www.wipro.com/blogs/krishna-kumararavamudhan/ ---- Contact Wipro Blogs By Author The power of artificial intelligence in data integration platforms Please fill the required details to access the content Krishna kumar Aravamudhan Krishna kumar Aravamudhan Practice Director - Information Management, Data, Analytics & Artificial Intelligence, Wipro Krishna has over 19 years of business and IT experience in the areas of information management and analytics solutions for global organizations. In his current role, he is responsible for practice vision and strategy, solution definition, consulting, competency development, and nurturing of emerging trends and partner ecosystem in the areas of data and information management Fast decision-making is a key ask for the

business to stay competitive in market. It is crucial that the business gains insights from its enterprise dataset and takes necessary and timely action.

## The power of artificial intelligence in data integration platforms

---- Arcticle source ---- https://www.wipro.com/blogs/krishna-kumararavamudhan/the-power-of-artificial-intelligence-in-data-integrationplatforms/ ---- About the Author Contact Wipro Related Blogs AI Driving 5G Innovations for Communications Service Providers Making ML Models in Banking Resilient using Adversarial Attacks Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Please fill the required details to access the content The power of artificial intelligence in data integration platforms Data-driven decisions made faster and simpler October | 2019 The article discusses: Fast decision-making is a key ask for the business to stay competitive in market. It is crucial that the business gains insights from its enterprise data set and takes necessary and timely action. However, the challenge the business faces in enabling this is that data is growing at a fast rate due to incorporation of non-traditional data sources (Machine log, social media post, streaming data etc.) along with the traditional ones (CRM, ERP, RDBMS, file system data etc.) in the data governance ecosystem. Hence, data integration and summarization of the data deluge into useful information for developing insights is becoming a big necessity. The prime ask for organizations is how to spend more time on data analysis rather than data curation. Most business users currently spend more effort on data preparation than analysis. Apposite strategies on data integration plays a vital role here to assist business in reversing this trend. Data Integration (DI) with Artificial Intelligence (AI) capability is the perfectfit strategy to accomplish automation of data preparation task while additionally bringing in the agile and efficient method analysis of big data into its core competence. In the DI with AI framework, human intervention is an option, which ought to be applied only when necessary. State of automation in data integration The current data integration frameworks experience three levels of context-setting information: The degree of cohesion of the enterprise data with the defined schema model lays down the level of AI infusion in data integration and the proportionality of human assistance in the entire data flow. As the current DI tools have vast experience of handling business data, it can infer the metadata of the enterprise dataset and document the same in a catalogue format for reuse. An exhaustive and efficient information catalogue assists in standardizing DI, governance, and subsequent data discovery framework by defining common and infrequently referred data names, meanings, and usage for the enterprise. Though business is the custodian of this information and can be consulted for creation of such catalogue requiring human intervention, the DI tools, with its nearly five-decade involvement in cataloguing and modelling business data across all industries, is in ideal shape now to imbibe AI into its framework to automate the creation of business-specific

information catalogues. AI capabilities to simplify integration Current DI technologies are imbibing growing AI capabilities in its framework to cater to the enterprise demand. These AI capabilities in the DI platform help change the way businesses make decisions: The case for embedded recommendation engine One of the other notable improvisations in the DI space leveraging AI/ML is embedding Recommendation Engines in the integration platforms, which can automate data integration process utilizing the metadata sharing and analysis information obtained through deciphering large corporate data set. It advises the best-fit data pipeline by performing graph and cluster analysis based on the way data is accessed in different enterprise-wide applications. The inline technology of recommendation engines probes data-access frequency, commonly used data component in various queries/data mining methods and user roles in the data analytics. The advent of embedded engine sets the ground for maximum business user involvement in the data integration process through the best possible automation of the data pipeline-creation process. Advantage AI with Ml Artificial Intelligence with ML techniques solves complex data integration problems. For instance, conventional methods cannot be handling huge volumes of data gathered from different sources like streaming and IoT. In such scenarios, AI/ML techniques not only solve data processing but also improve integration flow. Optimization of the data integration platform by imbibing AI into it improve execution performance by simplifying the development lifecycle, reducing the learning time for the technology, and lowering the dependency on high skill requirement for ETL workflow creation. Another notable advantage is ML can train the data set to make it apt for configuration of statistical modelling on it without any manual intervention, hence alleviating the human imposed issues. Advantages of AI with ML also include: AI-enabled decision-making Data integration infused with AI is gradually automating organization-wide application flow and creation of data pipeline. With the advent of big data storage(HDFS/ Hive/ Cloud storage), data integration tools are accessing large volume of diverse data, enabling its embedded recommendation engine to infer the data structure components intuitively out of this and utilize the same for automating the repetitive and redundant data integration tasks. The AI engine is gradually evolving its inferred and tagging analysis logic, metadata discovery framework and acquired knowledge base to cater to the growing demand of DI pipelines. Thanks to AI that manages most of the data preparation task, business users are leveraging their domain knowledge armed with ML and statistical concepts on the enterprise dataset for extracting business insights that drive the organization towards success. Industry: Krishna Kumar Aravamudhan Practice Director - Information Management, Data, Analytics & Artificial Intelligence, Wipro Krishna has over 19 years of business and IT experience in the areas of information management and analytics solutions for global organizations. In his current role, he is responsible for practice vision and strategy, solution definition, consulting, competency development, and nurturing of emerging trends and partner ecosystem in the areas of data and information management Sugata Saha Lead Consultant - Data, Analytics & AI, Wipro Sugata has 14 years of experience in the field of data warehouse, data modeling, data integration and business intelligence architecture. He is currently working as a Data Architect and Automation Consultant for a client. He is also involved in delivering solutions focusing on data integration and cloud data warehouse.

5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the source ----- https://www.wipro.com/blogs/tom-richer/ ---- Contact Wipro Blogs By Author 5 key elements of a cloud-native approach Please fill the required details to access the content Tom Richer Tom Richer Cloud Consulting Partner, Wipro Tom Richer is a Cloud Consulting Partner with Wipro based in New York City. He brings a strong professional experience in cloud computing and an excellent understanding of the business and technology driving the cloud services market. As a cloud evangelist, he has been actively involved in shaping and advising enterprises in the consumer business, retail, communications, and financial services sectors on cloud. Modern consumer-driven businesses need to deliver new services more quickly than their competition to stay ahead of the game. Successful consumer-driven businesses are achieving this by going cloud-native.

## 5 key elements of a cloud-native approach

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application development lifecycle while increasing the quality of produced software that is delivered continuously. Besides adopting new automated toolchains, this requires a real culture change. Spanning the whole delivery pipeline, the goals of DevOps include faster time to market and value. shortened lead-time between fixes and new releases and versions, faster recovery time in the event of a release failure, and faster deployments. 3. Microservices Microservices is a variation of services-oriented architecture (SOA) that involves services that are "loosely coupled" and decomposed. This results in the application being more modular, granular, and easier to test. Microservices works well in a continuous delivery and deployment setting enabled by DevOps. 4. Containers Containers provide a standardized way to package up application code along with its configuration and dependencies such as libraries and binaries. They are portable and can move from one computing environment or cloud to another. Their lightweight nature compared to virtual machines allows them to be instantiated and decommissioned faster, freeing up precious resources from hosts. The portable nature of containers also avoids vendor lock-in to the underlying environment (whether it be on-premise or in the cloud). In an enterprise setting, containers require an orchestration platform to help manage the lifecycle including controlling and automating container-specific tasks, provisioning, deploying, and scaling up containers, allocation of resources, and health monitoring. 5. Serverless Serverless, or Functions as a Service (FaaS), is when a public cloud provider such as AWS, Azure, or Google Cloud dynamically allocates resources to execute a piece of code (a function) based on an event being triggered by an HTTP request or some database or scheduled event. FaaS is in essence a managed service and the cloud provider only charges for the resources used to run the code. In this new serverless world, a microservices approach is used to create these stateless functions. With the adoption of technologies like IoT and sensors across consumer-driven industries, having cloud functions triggered to react and analyze in an abstracted manner from the event delivers a whole new way of extending an application in a flexible manner. Conclusion Cloudnative computing is forcing organizations to think about new models and new delivery methods. In an era where velocity is critical to success, a growing number of companies especially in the retail and consumer-focused industries are embracing a cloud-native approach for application development and deployment. This approach is helping companies use customer data to guide their operations, make better-informed business decisions, and create a highly satisfying customer experience. Cloud-native gives unmatched business speed, agility, and insight to help companies identify customer needs early using customer data and respond almost instantly with high-velocity cloud-native application development. Industry: Tom Richer Cloud Consulting Partner, Wipro Tom Richer is a Cloud Consulting Partner with Wipro based in New York City. He brings a strong professional experience in cloud computing and an excellent understanding of the business and technology driving the cloud services market. As a cloud evangelist, he has been actively involved in shaping and advising enterprises in the consumer business, retail, communications, and financial services sectors on cloud. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about

application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business Arcticle source ----- https://www.wipro.com/blogs/ramalal-saripalli/ -----Contact Wipro Blogs By Author The Network is the new Enterprise Please fill the required details to access the content Ramalal Saripalli Ramalal Saripalli The Head of Product Management in the Business Platforms group in the Digital Operations and Platforms business division of Wipro Ramalal Saripalli is the Head of Product Management in the Business Platforms group in the Digital Operations and Platforms business division of Wipro. He has over 16 years of experience in managing revenue generating products and platforms used globally, across multiple industries and domains - market data products for investment banking, wealth management products for retail banking, distribution management products for consumer packaged goods and digital transformation platforms for enterprise operations Tough market competition with shrinking margins are forcing managers to 

#### The Network is the new Enterprise

---- Arcticle source ---- https://www.wipro.com/blogs/ramalal-saripalli/thenetwork-is-the-new-enterprise/ ----- Contact Wipro Blogs By Author Related Blogs 4 Ways Super Funds Can Elevate Member Experience The CHRO Imperative for the Hybrid Workplace How organizations should identify and cope with the challenges to cultural transformation? Please fill the required details to access the content The Network is the new Enterprise November | 2019 This article discusses on how a network-enabled distribution system can help generate value and provide a competitive advantage to enterprises Tough market competition with shrinking margins are forcing managers to scrutinize every aspect of their operation. It is increasingly getting harder to ignore the customer's on-time, every time demands. Needless to say, enterprises are looking at how a network-enabled distribution system can provide a competitive advantage while acting as a value generator and a catalyst for new business processes. Today, the distribution network of an enterprise that serves the purpose of delivering finished goods and services to consumers, is coming under increasing scrutiny by the CXOs. One of the reasons being that the network has largely remained untouched by the various advances in the enterprise software technology. The key focus of enterprises has been on optimizing the internal business processes to maximize efficiency and plug revenue leakages, while producing goods. Hence, the growing adoption and popularity of enterprise software applications, such as Enterprise Resource Planning (ERP), Supply Chain Management (SCM), Business Process Management (BPM), Customer Relationship Management (CRM), etc. All of these enterprise software

applications have converted a disconnected enterprise into a connected enterprise. However, enterprises have been slow to respond to the challenges of maximizing efficiency in delivering finished goods to grow customer base and increase customer engagement. Over the years, the challenges in managing the distribution of finished goods have multiplied due to the emergence of specialist partners for logistics, warehousing, financing, after sales service, etc., and market place platforms that are driving the sharing economy. Given this, there is a need to connect various partners in the enterprise's distribution network and empower the enterprise to orchestrate the business processes across the network, thereby maximizing efficiency of the network. Today, the network is the new enterprise. The existing enterprise software applications have helped transform enterprises by providing these key benefits The applications are necessary and sufficient for an enterprise to optimize its business operations as long as the enterprise has a direct connect with the consumers. This applies to markets where the distribution networks do not exist or the same are controlled by the enterprise. For example, in the advanced economies like the G7, most enterprises do not have a multi-level distribution network, and the enterprise has complete visibility into the distribution and the consumer. If there are multiple tiers of distributors involved, the enterprise is separated from the consumer by multiple degrees. Consider the challenges of enterprises in emerging markets in Asia and Africa that participate in open, multi-level distribution networks that are not operated by them: And the KPIs/business goals that most of these enterprises chase are: These KPIs are heavily dependent on the business processes of the partners. It is not enough to optimize the processes within an enterprise. Just as ERPs have transformed enterprises by connecting disparate functions within an enterprise, there is a need for a platform that connects all partners and "things" in a multi-level distribution network. With this new enterprise distribution platform, the enterprise will have complete visibility of the supply and demand at various levels, as well as that of the end consumer. This will help the enterprise devise and implement the right strategies to increase production (in case demand exceeds supply) or to increase sales and liquidate stock through promotions and incentives (in case supply exceeds demand). The key to achieve the above KPIs is to orchestrate the business processes of the partners, in addition to optimizing the processes within an enterprise. The key requirements for this kind of a network platform are: There are two critical success criteria for the distribution platform: On-boarding partners on to the platform: Enterprises should prepare an on-boarding roadmap based on the types of partners. regions and products. One significant challenge that deters partners (applicable only to multi-brand partners) from on-boarding the platform is on-boarding as many network platforms as the number of enterprises. The platform should have the capability to on-board multiple enterprises and partners with the necessary controls in place, helping the partner to transact with all enterprises on a single platform. This will also help create the network effect, quickly increasing the number of partners on the platform. Enterprises should pass on the business benefits of on-boarding the partners, such as low inventory carrying costs, lower returns, etc., to the partners and offer them incentives. For example, the partners get 2% extra margin if they transact on the platform. Integration with core systems of record: The enterprise network platform should expose some APIs for easy

integration to pull and push data from/to the systems of record. Data should be secure in the platform with a robust access control architecture that strictly controls the data that is accessed and shared by various partners within the network. With the adoption of IoT and the growing number of specialist partners in distribution, connecting all the partners and "things" is only a natural evolution of the original need for a connected business. ERPs and other enterprise software connected different functions within an enterprise and connected the supply chain. Connecting the distribution chain is the next logical and natural progression that enables enterprises to ride the next wave of process transformation. It is only a matter of time before a connected distribution network becomes the norm, like ERP in the last couple of decades. Industry: Ramalal Saripalli The Head of Product Management in the Business Platforms group in the Digital Operations and Platforms business division of Wipro Ramalal Saripalli is the Head of Product Management in the Business Platforms group in the Digital Operations and Platforms business division of Wipro. He has over 16 years of experience in managing revenue generating products and platforms used globally, across multiple industries and domains - market data products for investment banking, wealth management products for retail banking, distribution management products for consumer packaged goods and digital transformation platforms for enterprise operations. Despite the longstanding history of private pension plans, superannuation was introduced to Australians over 20 years ago to help them support their retirement in a financially viable way. Fast forward to 2020; it is now a A\$3T business. Over the last two decades, superannuation has become complex, highly regulated, and vulnerable to scandals. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just neglected www.wipro.com/blogs/sarath-kumar-ganesan/ ----- Contact Wipro Blogs By Author The shift from personalization to hyper-individualization Please fill the required details to access the content Sarath Kumar Ganesan Sarath Kumar Ganesan Practice Head, CRM/CX - Oracle Technologies, Wipro Limited Sarath has 15+ years of experience in developing and architecting Oracle based CRM/CX solutions for customers across the globe. He holds a B.Tech Degree from Madras University. From 2017 until now, in November 2019, the closure of brick and mortar stores in the US - like Toys "R" Us and Macy's, for example - may seem to suggest a downturn in retail.

## The shift from personalization to hyper-individualization

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Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content The shift from personalization to hyper-individualization November | 2019 From 2017 until now, in November 2019, the closure of brick and mortar stores in the US - like Toys "R" Us and Macy's, for example - may seem to suggest a downturn in retail. However, disruption is happening right there - the online retail segment has grown by 105% in the same period. Building on the momentum, e-commerce giants like Amazon continue to innovate by embedding artificial intelligence into their use cases and expanding their business into developing countries where brick and mortar stores are still the order of the day. This disruption being experienced by the Retail Commerce industry is guite similar to what we saw in the movie rental space - an industry ruled by Blockbuster Inc. until the early 2000s was overtaken by digital content providers like Netflix in the latter half of the decade. The parallels are strikingly similar due to unlimited possibilities in the digital space. A key part of digital e-commerce today is the shift from personalization (providing targeted content and catalog based on the users' segments - geolocation, demographics) to hyperindividualization. In a personalized marketing strategy, each consumer is part of a segment with largely similar choices - but there will always be certain preferences that would set each consumer apart. And hence, when a segment is targeted, the individual user would not always get a relevant offer. Taking it a step forward, a hyper-individualization marketing strategy leverages artificial intelligence and real-time data to help understand true intent behind the behavior of individual users. This allows organizations to curate and deliver content, product/service offering specific to each individual user - based on factors such as past orders, social media interests, etc. It will not be long before you will be reminded to buy a smart phone after noticing your frequency of changing mobile phones and suggesting a phone with features of your interests. For instance, in one of our e-commerce transformation discussions with an organization, the core focus was on how to make the experience personalized, once the user logs in, and display promotions based on his/her interests in a banner slide show. Once the user clicks on the banner or pauses on a particular banner to read more, an automated chat bot would notify the user on the offer, chat to answer gueries and to take the user through the purchase journey without having to step out of the chat. This would give a completely personalized touch to the entire user experience, as if an agent who knows your preference quite well is helping you with placing an order. This would've been a futuristic use-case a couple of years ago, but not anymore. There are still reasons for consumers to go to a physical store. Next-generation technologies like Augmented Reality (AR) and Virtual Reality (VR) are yet to reach a stage of completely replacing a shopper's experience of touch, feel, try and buy. The next logical step for retail commerce organizations would be the adoption of hyper-individualization to ensure they are enabled to ride the wave of digital disruption. Industry: Sarath Kumar Ganesan Practice Head, CRM/CX - Oracle Technologies, Wipro Limited Sarath has 15+ years of experience in developing and architecting Oracle based CRM/CX solutions for customers across the globe. He holds a B.Tech Degree from Madras University. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and

other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to reexamine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/sanjay-kr-bhartiya/ ---- Contact Wipro Blogs By Author How Cutting-edge Technologies are Driving Next-gen Retail How Pharma is Adapting to Digital Interventions and Driving Healthcare Please fill the required details to access the content Sanjay Kr Bhartiya Sanjay Kr Bhartiya Vice President - EngineeringNXT, Wipro Sanjay Kr Bhartiya is a Vice President at Wipro. He is part of the Engineering Services service line leading and managing the strategy, P&L and delivery for BFSI, Consumer, Health and Communications verticals. Sanjay has over 27 years of business experience spanning multiple leadership roles. Prior to joining Wipro, he was with Aricent (acquired by Cappemini) for 13 years. He was responsible for industry segments that included telecom carriers, equipment providers, global retail and internet software companies. He also led several large engineering transformations programs. Previously, he has spent time in various senior roles at Tata Elxsi and Creatus. Sanjay holds a BS in Computer Science from Michigan Technological University. We saw the gradual decline of independent mom-and-pop stores when e-commerce juggernauts, led by Amazon, took over the global retail industry. The pharmaceutical industry has always been in the throes of change

### How Cutting-edge Technologies are Driving Next-gen Retail

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digital competitors. However, before we rush to blame any particular ecommerce entity for this transformed ecosystem, I guess we all know where the real source of disruption lies: digital technology. Engineering processes, fuelled by leading-edge technologies, are driving the future of retail. Besides the Internet of Things (IoT), mobile and Internet-connected devices, technologies such as artificial intelligence (AI), cloud computing, augmented reality, and big data have enabled the fluid nature of today's retail environment. At Wipro, we believe that this will call for an "Engineering NXT" approach, which will enable organizations to engineer products, platforms, people and technologies in this new world at scale. We foresee it shaping the way retail companies will add value to customers at various stages of the product or platform lifecycle. In fact, engineering R&D is already the fastest growing segment within the IT sector and is globally expected to reach a valuation of USD 145-55 billion by 2020. Smart technology keeps retail relevant In the new increasingly digital world, retail organizations are now using big data to analyze customer behavior in real time and provide personalized offerings. Big data has also resolve critical issues, such as inventory distortion, managing stock, and streamlining delivery options. Real-time Engineering capabilities have brought end-to-end visibility across the board covering consumers, associates and organizations, and are able to connect the dots to fine-tune efficiency, reduce wastage, and mine new business values. Other data-driven strategies now look at targeted advertising platforms on social media sites that help retailers forecast shopping trends. In recent years, we have also seen AI revolutionizing retail to optimize customers' shopping experiences. AI's true disruptive potential is being deployed in the supply chain, merchandising, and customer engagement, among other emerging applications. AI-enabled devices, like Google Home, not only locate our car keys but also help us research and compare product prices, thus making the competition for retailers fiercer than ever. At Wipro Industrial and Engineering Services, we recognize engineering driving the innovation story and offer our clients nextgeneration technology integration to scale that enables organizations to go to market faster. For instance, we recently re-imagined a client's customers' shopping experience, delivered through a cutting-edge cloud platform that provided digital transformation in real time. Our solution enabled the retail organization to reorient its processes and drive revenue. Across the retail landscape, in similar ways, retailers are using technology to work harder and smarter. For instance, digital twin technology is gaining currency in the consumer retail industry to reduce stock wastage and minimize the cost of delivering goods. Here, the creation of a digital replica of a physical product is used to predict, track, and optimize an object's real-time performance. In this way, using a digital twin throughout a product lifecycle, gives businesses valuable insights into a product before it builds its final version. For example, data pulled from IoT sensors embedded in supermarket shelves can create a virtual replica of a brick-and-mortar store. Store managers can also closely monitor inventory and ensure that shelves are stocked in keeping with product demand and movements. Thus, a digital twin not only improves strategic decision planning, but also enables an integrated supply chain. Further, savvy retailers are increasingly turning to engineering capabilities within their stores and manufacturing plants/ distribution centers while leveraging the cloud to improve efficiency, reduce costs, and simplify a complex IT infrastructure. A variety of retail functions

are suited to cloud computing, including space planning, sourcing strategy, merchandising, transport management, and demand forecasting. For example, the cloud captures an accurate digital model of the floor plan and attributes of all store locations, improves visual merchandising, and makes key data-driven decisions about purchasing. High efficiency and self-running distribution centres functioning round-the-clock are leveraging Engineering solutions like Digital Twin, Track & Trace and Autonomous. Solutions such as video analytics based intelligence and Drone-based monitoring are helping elevate the retail operations to a brand new level of productivity and agility. Food Safety monitoring solutions like Cold Chain are bringing end-toend transparency for grocery stores, supply chain and distribution organizations, while making it easier for customer choices. What's in store for the future of stores? With customers becoming more informed and demanding, retailers have to go out on a limb to provide stimulating and unforgettable experiences to their shoppers. When I see intelligent digital kiosks and hyper-customized concierge services, I wonder what else could augment the customer experience in the future. But for now, it looks like technology is all set to pamper customers even further. Chatbots are helping customers find the right products, place orders, and even alert retailers about disgruntled shoppers! Augmented reality offers virtual trial rooms equipped with touch screens and smart interactive mirrors that check the availability of outfits in real time. There is more to come. In the coming years, sophisticated holograms will help shoppers visualize products and even tweak their design. Ultra-fast delivery would be possible using drones that will also be used in warehouses for improved inventory control. At Wipro, we aspire to meet the needs of our clients through our Engineering NXT framework that keep pace with evolving customer preferences and dynamic market trends. With so much happening in the industry, the new era of retail seems poised for an exciting journey ahead. So, the next time you forget your shopping list, don't worry. Let the friendly hypermarket chatbot take care of that for you. Industry: Sanjay Kr Bhartiya Vice President - EngineeringNXT, Wipro Sanjay Kr Bhartiya is a Vice President at Wipro. He is part of the Engineering Services service line leading and managing the strategy, P&L and delivery for BFSI, Consumer, Health and Communications verticals. Sanjay has over 27 years of business experience spanning multiple leadership roles. Prior to joining Wipro, he was with Aricent (acquired by Cappemini) for 13 years. He was responsible for industry segments that included telecom carriers, equipment providers, global retail and internet software companies. He also led several large engineering transformations programs. Previously, he has spent time in various senior roles at Tata Elxsi and Creatus. Sanjay holds a BS in Computer Science from Michigan Technological University. To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. CSPs are looking to the enterprise (business-to-business) segment to help monetize their investments in 5G. As management guru Peter Drucker once said, "What gets measured, gets 

#### How Pharma is Adapting to

### Digital Interventions and Driving Healthcare

----- Arcticle source ----- https://www.wipro.com/blogs/sanjay-kr-bhartiya/howpharma-is-adapting-to-digital-interventions-and-driving-healthcare/-----About the Author Contact Wipro Related Blogs Connectivity and Interoperability: Realizing the Full Potential of Comprehensive IoT Solutions Strategic Partnerships Will Drive 5G Success for Communications Service Providers Using IoT to Create an Intelligent Enterprise Please fill the required details to access the content How Pharma is Adapting to Digital Interventions and Driving Healthcare November | 2019 The pharmaceutical industry has always been in the throes of change—be it a radical medical breakthrough or unique product and service innovations that are driving the wave of transformation in the sector. In recent years, another gradual but tenacious change that has impacted the industry is the groundswell of digital revolution led by Artificial Intelligence (AI), Machine Learning (ML) and big data, among other technologies. These digital trends have prompted pharma majors to invest billions of dollars in tech-driven healthcare solutions that could enable them to make more informed decisions, leading to improved patient care. It has made it essential for every organization to adopt an "EngineeringNXT" approach, where it leverages leading-edge technologies to deliver value to customers at various stages of the product or platform life cycle. Recent forecasts emphasize this trend, with big data vendors in the healthcare and pharmaceutical industries expected to earnover\$5.8b in revenue by the end of 2020. Approximately \$1,228 billion was spent on corporate engineering globally while investment from the top 1,000 R&D spenders totalled around \$812 billion. The pharma industry contributed a sizeable chunk of this. Though it is hard to imagine a world without doctors, one has also got accustomed to an Internet-driven healthcare ecosystem that has spawned a host of interactive online resources wherein valuable medical information is available to consumers. To put this in perspective, the next generation of healthcare delivery started with the advent of the Internet. With just the click of a mouse, consumers are increasingly engaging with online medical communities—and each other —to share their personal medical histories, offer feedback and seek solace in patient support groups. Be honest: how often do you find yourself on one of these discussion forums to self-diagnose a niggling health issue? Gone are the days when doctors would primarily rely on medical journals to stay abreast of the latest medical developments! Today, even the medical fraternity is turning to online information portals to research information. Over the years, the Internet has, without doubt, emerged as an influential force that has enhanced consumer satisfaction and changed the patientphysician dynamics as one knew it. This trend has fundamentally altered healthcare's traditional business model, and also the future of patient care. Aided by rapid digitization and evolving consumer preferences, the pharma

industry has finally started adopting cutting-edge digital technologies. An Engineering Next approach is finally here. AI: The new 'miracle drug' in pharma? As I see it, AI is accelerating this trend, with leading pharma companies integrating AI into their treatment options and products. This is primarily because the technology is viewed as a gamechanger to develop new drug discoveries for chronic ailments. AI is being used to gain insights into the presence of potential life-threatening diseases among patients by sifting through disparate datasets via a cloud-based analytics platform. Adopting such a 'digital first' approach has led pharma companies to build new technology models that will not only help them venture into uncharted territories of medicine, but also aid physicians in identifying rare diseases. Among other critical applications of AI, several healthcare start-ups deploy the technology to aid in early-stage drug discovery. Biomedical researchers mine curated databases to extrapolate information to enable niche areas of drug discovery by leveraging the combined power of deep learning and machine learning. For example, state-of-the-art machine learning capabilities are applied at every pain point of the drug discovery process, including from anti-body selection to post-marketing surveillance activities. More and more pharma players are embracing a machine learning approach to the process of drug design and development as it cuts costs and improves efficiency. The technology helps researchers understand, identify and develop chemical specificity that will form the bedrock for the discovery of new drugs. Thus, machine learning is slowly paving the way for anew paradigm of science that engages in innovative ways with the new frontiers of technology. The pharma industry is also developing deep learning tools in biomedical applications to offer personalized solutions for cancer and other diseases. Consider the recent example of the National University of Singapore that helped researchers halt the advancement of cancer in a patient by using AI-enabled tools. The technology analyzes the patient's genetic profile and prescribed the optimum personalized treatment that will lead to a successful outcome. Such medical breakthroughs are becoming a reality since pharma players are identifying multi-disease biomarkers that generate novel insights into patient diagnosis by employing sophisticated predictive analytics platforms. In this regard, Wipro's "Enterprise brain" provides a Medical Domain Ontology driven Meta data platform for ingestion of both structured and unstructured data sources, extracts semantic meaning and relationships, and represents knowledge in a computable form to enable whole new classes of intelligent applications powered by AI and curated knowledge. The knowledge graphs enable new capabilities with a user friendly interface and provide the ability to monitor patient journey including lineage information, analyze marketing effectiveness, and report on business performance. The road ahead for digital pharma As patients become increasingly picky about their online and offline healthcare options, pharma companies are striving to deliver optimum value across the patient lifecycle. Besides using technology for radical scientific applications, they are taking other initiatives to improve patient care and scale their operations. This is evident in the way any number of digital wearables and apps are within easy reach of consumers to empower them with vital health information. By doing so, savvy pharma companies are helping consumers stay engaged with their patients. Much of this is possible due to advanced analytics and sensors that help pharma players streamline their business processes and achieve frictionless agility

in their supply chain. By offering tailormade healthcare solutions using digitally-enabled products such as wearable electrocardiogram devices, busy physicians save time even as they stay remotely connected with their patients. At Wipro, we recognise that efficient logistics for pharmaceutical companies is driven by digital technology. For instance, we experienced the transformative impact of technology when the cold chain monitoring solution that we developed for a major pharma company, using IoT and Blockchain technology, enabled it to capture real-time data on temperature, humidity, and location of drug shipments for the first time. Our solution made possible assurance of the safety and integrity of the drug during transport for the organization across 100 countries. Another key value driver for pharma companies lies in delivering digital technology through an omnichannel approach. Consumers are able to stay connected with their healthcare providers through a plethora of channels such as smartphones, connected devices, apps, social media, chatbots and other digital platforms. This not only ushers in streamlined and real-time business intelligence, but also improves customer satisfaction in the long run. Winning pharma companies are those that are ready for this changed world, staying hyperfocused on investing in a wide range of new technologies that gives them a clear blueprint for future strategy. At Wipro Industrial and Engineering Services, we recognize this and our EngineeringNXT framework enables products, platforms, and technologies at scale. In anticipation of tomorrow's world, we have transformed ourselves from being a technology provider to offering our clients a strategic partnership that is built on market customization, faster time to market, next-generation technology integration, enhanced products and platforms, innovation, and reduced risk and investment. We know that with such an array of digital technologies as well as talent and business partnerships, pharma companies will be ready to ride the wave of innovation in the years to come. Industry: Sanjay Kr Bhartiya Vice President - EngineeringNXT, Wipro Sanjay Kr Bhartiya is a Vice President at Wipro. He is part of the Engineering Services service line leading and managing the strategy, P&L and delivery for BFSI, Consumer, Health and communications verticals. Sanjay has over 27 years of business experience spanning multiple leadership roles. Prior to joining Wipro, he was with Aricent (acquired by Capgemini) for 13 years. He was responsible for industry segments that included telecom carriers, equipment providers, global retail and internet software companies. He also led several large engineering transformations programs. Previously, he has spent time in various senior roles at Tata Elxsi and Creatus. Sanjay holds a BS in Computer Science from Michigan Technological University. To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. CSPs are looking to the enterprise (business-to-business) segment to help monetize their investments in 5G. As management guru Peter Drucker once said, "What gets measured, gets https://www.wipro.com/blogs/surya-potula/ ---- Contact Wipro Blogs By Author Opening the doors to the future with JDE Orchestrator (just add voice!) Please fill the required details to access the content Surya Potula Surya Potula Finance Business Analyst - Oracle Certified, Wipro Limited Surya has over 9 years of experience in IT with functional experience in helping clients drive better business outcomes with Enterprise Applications. He is an expert in Automations, EDI, Integrations, Order to cash, procure to

# Opening the doors to the future with JDE Orchestrator (just add voice!)

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recorder feature to replicate the manual process of creating the service requests by the developer. Process recorder is a new and user-friendly feature. It simplifies the process of generating form requests and automates the process of "capturing parameters" (such as exchange rates) required to trigger any process. The process recorder creates and executes service requests directly using AISto communicate with third-party systems. Voice commands do the trick However, JDE Orchestrator can be made simpler and more adept at creating and executing processes. This can be done by allowing the business user to communicate via a chatbot or voice devices like Alexa or Google Mini. With a chatbot, the user can say, "Add a user to the address book"—an action performed often by IDE administrators. Creating a user requires the following steps: Add user record in Address Book>> Create a user profile >> Set up a role. This action can be performed quickly using chat conversations in conjunction with the Oracle Intelligent BOT service and orchestration. The chatbot technology can be applied to several repetitive and manual business processes within JDE. For example, the chatbot could open a multi-step process using a progressive conversational interaction. In the following case, the user focuses only on inputs and the system executes the repetitive steps on the backend: User: Create user John Chatbot: What is the address book number? User: AB# 1001 Chatbot: What is the alpha name? User: 'John' A bright future for Orchestrator The benefits of a process record feature go beyond the fact that this involves less development effort. With the process recorder feature, the process can be completed faster by non-technical users, saving hours and often days of resource time, with a reduced error rate. The system performs repetitive tasks like filling forms, completing documents, generating alerts when inventory is low or when credit limits need to be extended, etc., allowing the user to focus on exceptions and complex business conditions. The orchestrator uses verb-based commands like "Alert credit limit", "Alert me when inventory is low", "On-board employee" or "Create a sales order" making it easy to use without the need for extensive training. JDE Orchestrator is now a very powerful tool. With the latest features and the ability to create an autonomous, voice-based ERP, those using versions of IDE EnterpriseOne earlier than Release 9.2.2.4 can truly open the doors to the future. Industry: Surya Potula Finance Business Analyst - Oracle Certified, Wipro Limited Surva has over 9 years of experience in IT with functional experience in helping clients drive better business outcomes with Enterprise Applications. He is an expert in Automations, EDI, Integrations, Order to cash, procure to pay, General ledger, Fixed assets and Expense Management modules. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

### Demystifying SAP S/4HANA testing fundamentals

----- Arcticle source ----- https://www.wipro.com/blogs/kapil-saxena/ demystifying-sap-s4hana-testing-fundamentals/ ----- About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Demystifying SAP S/4HANA testing fundamentals November | 2019 As organizations are pushed to move toward SAP S/4HANA, there are several questions to consider. For instance, is my organization ready for this large transformation? Is the business community convinced with the simplicity of their business processes? Will they lose their competitive advantage escorted by the current system? Is Digital really the future? And so on. While these are all mission-critical debates, what would it look like if organizations can remove another big hassle of 'Testing'? To make it uncomplicated and derive business value from the technology advancement associated with SAP S/4HANA, customers should consider the following fundamentals: Planning well in advance: As they say, good planning is half the job done. SAP makes it easier to plan in advance and with conviction. With their collection of best practices which can be used with or without implementation of Solution Manager, nearly 40% of the planning cost can be reduced and also the coverage can be well defined during the blueprinting stage itself. 'Reuse' is a mantra that needs a well-defined framework for it to work. Ready for the Cloud: As corporates decide whether to have SAP S/ 4HANA on premise or on Cloud, they, in all likelihood, will have SAP S/ 4HANA as their core ERP product with all interfacing applications well defined on Cloud. While sketching this kind of a setup, ensure there is minimum dependency on each other during integration. A well-defined approach on API testing and its automation will advance the integration testing between the applications much before any application is ready to be deployed. Focused testing by Impact Analysis: To bring an equilibrium between volume/scale of testing to ensure risk-free movement to SAP S/ 4HANA and controlled testing cost & timeline, it needs a paradigm shift in

the overall testing approach. Impact-based testing plays a vital role to deliver the desired outcomes. It involves assessing the impact of this movement, pertaining to various dimensions, such as business process complexity, criticality, usage frequency & historic defect trend analysis. This approach helps in spotting 'Most at Risk' business processes & has focused testing to de-risk the overall implementation. Jump Start with Smart Automation: With SAP best practices in place, start the automation journey during the planning phase itself with a unique nomenclature and component-based automation framework. This works well when customizations are in control as advised by SAP. Most often, organizations are flummoxed by multifarious automation tools in the market. While doing so, adhere to maintaining the homogeneity between the third-party tools. The best way is to use inbuilt solutions to integrate freeware tools to maximize benefits without added cost. Another perspective can be using pre-built code, ascertaining it is coped well. Ensure the performance of your Digital World: Though SAP S/4HANA provides real-time processing of the entire company's data, it does not guarantee performance of the whole ecosystem. Thus, identify the most executed and business-critical transactions from the current production legacy systems and execute different performance tests (load, stress and endurance) on the new SAP S/ 4HANA to weed out any performance issues and set the new benchmark. The performance of most impacted tasks, like data intensive batch jobs, should also be tested with adequate test data. Conclusion: Testing of SAP S/ 4HANA (whether in a scenario of a greenfield implementation or a migration) and integration testing of SAP S/4HANA with Cloud-based applications may not be as intimidating as it is presumed, if anticipated in the right manner. A strategic amalgamation of third-party toolsets and Wipro's inherited frameworks will bring some sense of archetype to the approach. Wipro follows the AAA model, which includes Adopt SAP best practices, Adapt templates for custom development and Add new products in the landscape to bring automation as a process, upfront in the lifecycle. Industry: Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to reexamine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/sreejith-kurup/ ---- Contact Wipro Blogs By Author Business Case Determination in AI projects - Why it is everyone's business Please fill the required details to access the content Sreejith Kurup Sreejith Kurup Senior Consultant, Wipro HOLMES As part of Wipro HOLMESTM's Go-To-Market team, Sreejith works closely with customers and internal stakeholders of Wipro to understand their business processes and propose various AI-enabled solutions to facilitate process automation. He works closely with various business units of Wipro to identify automation opportunities for efficiency improvements and cost savings to the customer. With technological advancements taking shape at a rapid pace, Artificial 

### Business Case Determination in AI projects

#### Why it is everyone's business

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that the AI solution will impact increases, leading to making the business case stronger b. As the scale increases, the total cost of the AI solution decreases because quite a lot of service providers like AWS, Azure provide hardware and software using slab-based pricing. As a result, as the volume increases, the cost decreases. 3. Software costs: There are processes where the human intervention is less but the process needs proprietary software for doing work which humans cannot do, one such instance is software being used for executing complex rules. These business rules have been set up in the proprietary software, adding to the software size and complexity. In an AI solution, the solution can itself create these rules and even customize the rules automatically by understanding the customer specific data. These rules can be configured such that machine learning enables these rules to be recalibrated as and when the data changes. In such a situation, the AI solution replacing the proprietary software creates a business case. The underlying assumption is that the complex rules that were built into the proprietary software is built in an automated manner by the AI solution. 4. User experience: AI has started enabling work that humans previously thought of as difficult to execute. For example, processing large number of documents in a short span of time or auditing a huge uptick of invoices during the quarter or financial year-end was considered difficult to be done by human agents. Even if it is possible to have enough human agents to process the large volume, it is still difficult to arrange a large number of human agents for a short span of time and then release them. Digital agents make business case in such scenarios. What the user experience is after the project is executed by the digital agents makes the business case. Since user experience cannot be quantified easily, the business case can be the cost that an organization incurs in case of, say, leakages in payments done or penalties due to lack of proper compliance. Business case identification has become a key requirement in AI projects as AI projects have started getting into production implementation. The business case is important for both the business and process owners to understand their return on investment and decision-making iv. There are various ways to identify the business case as discussed above and it will vary from a case-to-case basis. References: i. https://www.horsesforsources.com/business-and-it-teams-collab 092019 ii. https://www.accenture.com/acnmedia/PDF-77/Accenture-Workforce-Banking-Survey-Report#zoom=50 iii. https://towardsdatascience.com/ rethinking-ai-machine-learning-model-management-8afeaa31d8f8 iv. https:// www.horsesforsources.com/business-and-it-teams-collab 092019 Industry: Sreejith Kurup Senior Consultant, Wipro HOLMESTM As part of Wipro HOLMESTM's Go-To-Market team, Sreejith works closely with customers and internal stakeholders of Wipro to understand their business processes and propose various AI-enabled solutions to facilitate process automation. He works closely with various business units of Wipro to identify automation opportunities for efficiency improvements and cost savings to the customer. Financial Services is one of the most challenging industries from a technology standpoint. Digital business transformation is now critical to the survival of virtually every organization, but effective change management must center on people. Successfully implementing automation systems might never be "easy," but platforms and solutions have emerged to make it source ----- https://www.wipro.com/blogs/atul-bhal/ ----- Contact Wipro Please fill the required details to access the content Atul Bhal Atul Bhal Lead,

### Personalize airline customerloyalty programs

#### with Amazon Personalize

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services can be used by developers with no prior machine learning experience but can still build sophisticated personalization capabilities into their applications, using machine learning technology perfected from years of use on Amazon.com. Amazon Personalize provides an activity stream from your application - clicks, page views, signups, purchases, and so forth - as well as an inventory of the items you want to recommend, such as articles, products, videos, or music. You can also choose to provide Amazon Personalize with additional demographic information from your users such as age, or geographic location. Amazon Personalize will process and examine the data, identify what is meaningful, select the right algorithms, and train and optimize a personalization model that is customized for your data (Amazon Personalize description sourced from https://aws.amazon.com/ personalize/). Apart from the multiple use cases for ecommerce, Amazon Personalize will be effective in improving customer experience for the airline industry and driving additional business through loyalty programs. Amazon Personalize for the Airline industry The power of Amazon Personalize in airline applications will help manage loyalty, and sales and promotions. Loyalty programs are not a new concept but due to the changing technology landscape and customer behavior, it needs to be relooked to improve customer experience. Traditional loyalty programs provide static options to the customer based on the loyalty points accumulated over a period. With Ml-powered Amazon Personalize, more curated and optimized options (travel packages, gifts, extended stays etc.) can be presented to the customer based on multiple factors like past travel interest, demographics, itinerary, hops etc. This can be made available to customers while booking the tickets or offline through custom campaigns. Amazon Personalize service brings to the Airline industry a unique opportunity to upgrade their existing loyalty program applications. This will enable loyalty applications to provide more personalized promotions and offers, proactive alerts for personalized promotions, travel packages, and gift purchases to passengers. For airlines, this will result in better customer engagement, stickiness, more digital ads, high conversion ratio to sales, thus resulting in increased revenue, improved partner ecosystem and above all, great customer experience. Benefits of the loyalty personalization application are given in Figure 1. Figure 1: A view of personalization-powered loyalty application and its benefits Loyalty programs are not restricted to the Airline industry but applicable across major customer facing industries like Banking, Retail, and Hospitality. As the loyalty programs evolve with advanced ML and Amazon Personalize service, in times to come, loyalty will be the key instrument for driving customer experience. Reference 1 - https://www.mckinsev.com/business-functions/ marketing-and-sales/our-insights/the-future-of-personalization-and-how-toget-ready-for-it Industry: Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise

today with ever-evolving technological advancements and the business Arcticle source ---- https://www.wipro.com/blogs/ravi-chandrasekaran/ -----Contact Wipro Blogs By Author Please fill the required details to access the content Ravi Chandrasekaran Ravi Chandrasekaran Practice Partner, Wipro Ravi Chandrasekaran is a Digital Transformation expert focusing on emerging technologies, specifically on Blockchain centric platform services offerings. With more than two decades of experience in business transformation initiatives across various industries, Ravi works alongside customers as their partner and advisor in the entire Blockchain adoption and innovation transformation journey. He can be reached Arcticle source ---- https://www.wipro.com/blogs/sudarshan-ranganathsurvepalli/ ---- Contact Wipro Blogs By Author Intelligent Bots to run an Efficient Enterprise Please fill the required details to access the content Sudarshan Ranganath Survepalli Sudarshan Ranganath Survepalli DMTS Senior Member with Wipro Technologies Sudarshan Ranganath Survepalli is a DMTS Senior Member with Wipro Technologies. He has over 16 years of experience working with various SAP products such as ERP, HANA, S/ 4HANA and the SAP Cloud Platform. He has successfully delivered several implementations and digital transformations for customers. He is currently a lead architect in the Digital Innovation Group for SAP Technologies. He can be reached at sudarshan.survepalli@wipro.com. Automation may not be a new term to many of us. Since the age of the First Industrial Revolution, mundane and routine tasks were automated at an increasing pace. \_\_\_\_\_\_

### Intelligent Bots to run an Efficient Enterprise

----- Arcticle source ----- https://www.wipro.com/blogs/sudarshan-ranganathsurvepalli/intelligent-bots-to-run-an-efficient-enterprise/ ---- About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Intelligent Bots to run an Efficient Enterprise December | 2019 Automation may not be a new term to many of us. Since the age of the First Industrial Revolution, mundane and routine tasks were automated at an increasing pace. Take the example of a printing press that reduced the pain of copying and allowed humans to deploy creative energies in penning newer ideas. Pretty much the same thing is now happening with Robotic Process Automation (RPA) in the enterprise software world. For over a decade, there has been gradual and steady progress in automating repetitive desk jobs. With the advent and ubiquitous availability of Machine Learning and Artificial Intelligence, the possibilities of automation have broken new frontiers. A medium to large organization would have an ERP (Enterprise Resource Planning) system in place, which is the central system of record for the entire organization. Therefore, any significant transaction

in core lines of business of Financials, Materials Management, Procurement or Sales needs to be recorded in the ERP system. However, we see that in day-to-day business, certain transactions are executed on 3rd party applications, and in some cases information gets accrued from various sources such as emails, Excel sheets etc. This information should be recorded back in the central ERP system for consistency and accuracy of data. We see the business users in these LOBs spend a lot of time in transferring the data into the central ERP system by manually creating these transactions. All such processes could benefit greatly by deploying RPA. A case in point is how the world of ERPs is imbibing RPA and cognitive technologies into routine tasks and transforming how transactions are executed. SAP, for example terms this iRPA - intelligent RPA. Prior to the advent of RPA, certain degree of automation was achieved through programming the required automation on a case-by-case basis with tight coupling between the programmed script and the application to be automated. The development of such programs were expensive and required heavy maintenance. Any change in either the application or the script would break the given automation. Enter RPA, we see the new tooling allows almost a Zero code approach to developing these automation workflows. These are adaptable to changes in the application. Delving further into a few scenarios where RPA can offer a significant boost to productivity, let us consider the case of a purchasing clerk who needs to key in the information received from a supplier as a printed doc, PDF, JPEG etc. into a Supplier Invoice on their ERP system. This is manual, repetitive and laborious and if the volume of such invoices is huge, it could lead to monotony and reduced efficiency. The same case when handled by an intelligent Bot, will require almost no efforts from the purchaser apart from triggering the bot. The bot would scan the PDF or physical documents, extract the required information and create the Supplier Invoice in the ERP system. Another case could be of year-end closing in a large organization where there could be hundreds of cost centres and profit centres that need to be locked for consolidation. This could typically be accomplished manually by locking each profit centre in the application. But RPA could provide a very efficient alternative where in you just list the profit centres to be locked in an Excel sheet and let the bot pick up each row and execute the locking action. In Summary, Intelligent RPA is the way forward for any enterprise to achieve the multi-pronged objectives of optimum business processes and empowered employees, which will ultimately result in improved customer service and satisfaction. Industry: Sudarshan Ranganath Survepalli DMTS Senior Member with Wipro Technologies Sudarshan Ranganath Survepalli is a DMTS Senior Member with Wipro Technologies. He has over 16 years of experience working with various SAP products such as ERP, HANA, S/4HANA and the SAP Cloud Platform. He has successfully delivered several implementations and digital transformations for customers. He is currently a lead architect in the Digital Innovation Group for SAP Technologies. He can be reached at sudarshan.survepalli@wipro.com. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are

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### Realize the potential of artificial intelligence with

#### new-age data analytics platforms

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innovators Open source applications have been the front-runners in transforming AI. Platforms like KNIME, H2O and Tensor Flow have evolved over time for building end-to-end AI/ML solutions. Open source libraries like Keras. Theano and Torch can be used as API with different platforms and frameworks to solve complex DL and ML problems. Tensorflow, a Google brainchild, is now widely adopted by companies like Dropbox, Uber, Twitter, eBay etc. The H2O platform has automated some of the most difficult ML workflows using AutoML functionality that automatically runs through all the algorithms and tunes their hyper parameters to produce a leader board of the best models. KNIME has gone one step further and created H2O extension so that power of both platforms can be leveraged to solve an AI problem. Data analytics: The commercial contenders With the open source world setting up the stage it was only a matter of time for commercially adopted platforms to begin their journey. RapidMiner is one of the leaders in commercial space. It is popular for its simple but effective GUI to build AI/ ML models. Besides providing numerous in-built ML algorithms, it supports open-source integration. SAS with the execution capabilities of its new suite of products, called SAS AI, remains a leader in the market. SAS is also expanding its user base with the help of its cloud based AI platform SAS Viya. TIBCO has acquired few new age business intelligence (BI) and advanced analytics vendors (like Jaspersoft, Spotfire, Statistica, Alpine Data etc.) to build an integrated powerful analytics platform. Alteryx, Dataiku and Datarobot are some of the other AI platforms. Alteryx provides end-to-end data science solution capabilities and is known for its intuitive workflows and drag-and-drop interface which eases the life of data analysts. Dataiku enables self-service analytics and machine learning pipelines through Data Science Studio (DSS), which is a collaborative platform for data scientists, data engineers and data analysts. DataRobot has automated ML and Time Series application along with enterprise AI deployment. The cloud giants Google, Microsoft and Amazon have already developed their own sophisticated AI/ML platforms for existing user base. They offer pre-trained AI services that can be integrated to any application to address common AI use cases. Most of the open source and commercial AI/ML platforms are either been incorporated by the cloud providers or are available in their marketplace for easy integration to take advantage of the scalability, high availability and security of the cloud, thus streamlining deployment and management of AI pipelines. To conclude According to the market research firm Tractica, the global AI software market is expected to grow more than 10 times to \$120 Billion by 20251. With investments flowing in from all directions, new platforms are launched almost every month to further democratize AI. Interesting fact to observe is that the market is more oligopolistic with the big cloud providers in the forefront and all other open source and commercial platforms fueling in their core strengths into it. Furthermore, all AI/ML platforms have built-in connectors and extensions to integrate with other platforms for seamless flow of information, giving users opportunity to harness the power of AI and ML. With such a variety of product mix in the market, the onus is now on the users to proficiently exploit them for faster decision-making processes. Reference 1-https:// www.statista.com/statistics/607716/worldwide-artificial-intelligence-marketrevenues/ Industry: Arijit Lahiri Principal Consultant, Data Analytics and AI, Wipro Arijit has over 13 years of experience in Data Analytics and Artificial Intelligence. He works with global clients to provide consulting support on

their analytics roadmap, technology transformation projects and adoption strategies. He is passionate about data analytics and loves to share his views on the changing analytics landscape and their implications on the AI world. Karthaveervarjun Vinjamoori Associate Data Scientist - Data Analytics & Artificial Intelligence, Wipro Arjun pursued his Masters in Data Science and has over 5 years of experience in the field of Data Analytics, wherein he has been working on various advanced analytics solutions, POCs and client projects. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force.

### Does migrating SAP applications to AWS save costs?

----- Arcticle source ----- https://www.wipro.com/blogs/mahadevansubramaniam/does-migrating-sap-applications-to-aws-save-costs/ ----- About the Author Contact Wipro Related Blogs Cloud Economics: Driving Business Value Through Discipline De-Risking Mainframe Modernization for the Banking Industry The Day After: De-risking Legacy Modernization Please fill the required details to access the content Does migrating SAP applications to AWS save costs? November | 2019 Some statistics claim migrating your SAP applications to AWS Cloud brings down infrastructure costs by 30%. Is this true? Also, is cost the only business driver behind migrating SAP applications onto AWS? In this ever-evolving business era, companies need to be innovative to stay relevant. And to be innovative, businesses need to be agile, flexible and adaptable. Their core business platform needs to support innovation. However, often, business needs that require innovation are curtailed due to shortcomings in the supporting IT platform. Organizations struggle to move ahead due to redundant hardware, unscalable infrastructure or legacy platforms that do not support upgrades or

migrations to a more future-ready platform like SAP S/4 HANA that not only simplifies ERP but also acts as the right platform to accelerate business innovation using IoT, Machine Learning etc To overcome these challenges, when a company's IT explores the options to migrate to public cloud platforms like Amazon Web Services (AWS) to host SAP, often, the analysis is restricted to 2 key factors: While the suitability of applications is a critical decision factor before migrating any application to cloud, a direct one-to-one comparison between on-premise vs cloud operating costs over a 3-or-5-year period can be misleading. That leads us to the original question of this article - Does migrating SAP applications to AWS really save costs? The cost dimensions of SAP migration to cloud During cloud assessment exercises, we often observe a TCO reduction by just migrating SAP applications onto cloud. However, this does not give a complete picture of the involved cost benefits. When SAP landscapes are migrated like-to-like to Cloud, often they are not 'right-sized' for AWS, the flexibility to modify Instances as per actual utilization at will is not taken into account, the ability to scale-up and down based on load, both, horizontally and vertically, is not factored in. Companies that adapt their SAP and Infra administration by utilizing the right tools and automation that can provide this flexibility and scalability tend to achieve true cost benefits of public cloud migration. These are indirect cost savings that are often not taken into account during a cloud assessment exercise and are not realized unless the right tools are utilized to manage SAP applications on public cloud So, how can you achieve these indirect cost savings and realize the true potential of SAP cloud migration and at the same time ensure that the chosen Infrastructure as a Service (IaaS) platform supports innovation. Realizing the true potential of SAP migration to AWS SAP and AWS have collaborated since 2011 to certify AWS for production deployments of SAP applications, platforms, and databases. AWS offers a broad set of native cloud services, spanning traditional services like compute, storage, and databases, as well as emerging technologies like IoT and machine learning on top of a reliable global infrastructure. On top, Wipro brings in its AWS-specific tools suite for SAP that helps in seamlessly migrating SAP applications to AWS and automate day-to-day maintenance operations of the SAP landscape. These tools help companies realize significant SAP infra cost savings over the one-time cost reduction achieved by migrating to cloud. Wipro's tools set for SAP on AWS helps in every stage of an organization's SAP journey onto AWS: Tools for migration Cloud Studio - Provides a comprehensive view of the entire IT estate including R-Lane analysis, inventory, move group definitions etc. MigMan - Assesses all code changes required during an AWS Cloud migration including Heterogenous Migrations, SAP Upgrades and Conversions Auto Pro for AWS - Automates provisioning, patching, SAP preinstallation tasks, AWS foundation tasks, thereby saving about 30% costs during cloud build and deployment Tools for SAP administration WakeUp SAP for AWS - Automated shutdown and startup of SAP applications on AWS including scheduled stop of virtual machines (VMs), thereby saving costs for non-prod instances SAP AutoScale - Scale-up and scale-down SAP instances at will, thereby allowing customers to pay only for what they use These tools help organizations make seamless migrations to AWS and also adapt cloudcentric ways of managing SAP applications to realize additional cost benefits. For instance, Wipro Cloud Studio for AWS analyzes and provides insights on SAP usage across the landscape and on systems that can be shut

down, leading to corresponding cost savings. It also analyzes the utilization of AWS resources and provides inputs towards optimizing hardware, which in turn helps switch to the right EC2 instances and save costs. SAP AutoScale (Horizontal scaling automation) helps organizations provision additional App servers only during month-ends or quarter end periods, thereby fully utilizing the flexibility that AWS pay-as-you-use provides. In addition, since AWS brings in a wide variety of SAP-certified VMs for various workloads starting from small EC2 instances to the largest supported HANA scale-out deployments of SAP, companies can continue along their S/4 HANA innovation journey without any restrictions of hardware, data centers, unsupported platforms etc. To conclude By running SAP on AWS, organizations not only can experiment more with speed, but also get more out of SAP with the broad range of services offered by AWS, including AWS IoT Core, data lakes on AWS and Amazon SageMaker. They benefit from the dual advantage of long-term reduction in IaaS costs along with a stable, futuristic platform to innovate. Wipro automation tools for AWS help businesses migrate their SAP landscapes seamlessly to AWS and realize the true potential of hosting and managing their landscapes on AWS. Be it an asis migration to AWS or transformation to S/4 HANA along with cloud migration, Wipro has helped many organizations choose the right path in their innovation journey. To know more, reach out to us at mahadevan. 04@wipro.com Industry: Mahadevan Subramaniam Senior SAP Cloud Architect Mahadevan is a SAP Solution Architect specializing in public cloud migrations and Implementations. He has led multiple SAP to public cloud migrations and HANA migrations and helped clients through AWS assessment, roadmap, sizing, migration, and maintenance of SAP landscapes. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business Arcticle source ----- https://www.wipro.com/blogs/shameeja-theruvath/ -----Contact Wipro Blogs By Author Enterprise Virtual Assistant in Data Center Please fill the required details to access the content Shameeja Theruvath Shameeja Theruvath Automation Consultant, Wipro Limited Shameeja is an experienced IT professional with expertise in creating Enterprise Automation Solutions. She has strong technical expertise in Infrastructure Consulting across Data Center Technologies. She is currently working with Wipro HOLMES<sup>™</sup> team in designing solutions for Enterprise Automation for customers across business and IT for different industry segments Digital transformation and constantly evolving digital landscapes are making internal and external stakeholders hyper-connected across mobiles, social 

### Enterprise Virtual Assistant in Data Center

----- Arcticle source ----- https://www.wipro.com/blogs/shameeja-theruvath/ enterprise-virtual-assistant-in-data-center/ ---- About the Author Contact Wipro Related Blogs AI Helps Insurance Companies Make Smarter Decisions Why Digital Transformation Is All About People How to overcome the common barriers to Automation: 3 Emerging Trends Please fill the required details to access the content Enterprise Virtual Assistant in Data Center December | 2019 Digital transformation and constantly evolving digital landscapes are making internal and external stakeholders hyper-connected across mobiles, social media and other digital avenues. This is changing the way enterprises manage the IT and business expectations in terms of IT needs fulfilment. There has been an exponential increase in the number of chatbot platforms used in enterprise supporting business functions like customer support, sales & marketing, order processing, and employee FAQs assistance. However, introducing an Enterprise Virtual Assistant as an extended arm for IT Administration/Development and other backend teams is a potential area that can deliver significant benefits. This article explores the possible avenue of using Chat Bot as an Enterprise Virtual Assistant for IT Administrators and development teams to enable them to collaborate better and to optimize their work. As part of their day-to-day responsibilities, these teams perform activities that are based on a pre-determined schedule which can be automated by simple scripts. However, this would still require the respective teams to trigger the actions and scan the output manually for remedial actions. Introduction of chatbots as an extended arm for these teams to trigger the actions in a voice driven mode would give them greater flexibility in terms of execution of the tasks. Some of the areas where we see enterprises experimenting and benefitting are: Enterprise Assistant -Possible avenues These are the potential areas where chatbots could be used across the enterprise: Internal IT /R&D The R&D team can use chatbots for requirement fulfilment rather than raising a service request through ITSM tool and waiting for infrastructure teams to revert. A user working on a collaborative task on Slack or Office 365 should be able to connect to a chatbot as another agent in the conversation group either by text or voice interface and seamlessly complete their request. A possible scenario is where a group of developers working on a collaborative platform like Slack and having chatbot as another agent in the conversation group who can be used to provision some of their requests like onboarding users to application or getting an environment ready. This would help developers in dynamic allocation of requests. The administration team (L1 - L2) can utilize the Chabot platform for performing daily routine activities of health and prepost upgrade checks. Based on the output of the these checks the L1 team can use the chatbot to take remedial actions automatically or provide specific inputs to trigger the actions rather than involving L2 team. The internal teams can also utilize the chatbot for power dialogues, for instance, resetting the server in times of mass outage and broadcasting the message within the teams. This leads to increased collaboration and guick resolution

of issues that would affect a larger audience. Support/Administrator Taking out the support team from monotonous activities and involving them only for exception handling raises the technical bar of the support team. The chat platform should be utilized to perform routine activities across the infrastructure devices including health and pre/post-upgrade checks. This will help reduce the overall MTTR - mean time to repair. Storage/server/ database administrators can consider using chatbots to perform operations that include spinning up drives/LUN creation/deletion or restarting database instances and creating new databases. While administrators are used to perform these tasks, using native tools and command interference of chatbots in incident management should be considered to help complete the task guickly. DevOps DevOps cycle has individual tools for development of software, networks and servers management, tests, monitoring, etc. However, collaborating and controlling DevOps pipelines in one window has helped developers' teams work in more efficient and agile ways. The development team can connect the chat platforms to their build systems to get notifications, raise queries and execute processes on their continuous integration servers. The bots can be used across the CI/CD lifecycle. This includes triggering the deployment jobs and perform deployments across environments, roll back of deployments in case of failures, status checks, perform post-deployment actions such as virtual machine restart. These would be routine activities in devops. The chatbot can be used by the devops team to provision infrastructure or provision application environments and enable monitoring and restarting of services and servers. Enterprise Assistant - Adoption success Any kind of change is susceptible to resistance unless effective change management is done. For successful adoption, concerned teams need to be educated and the communication needs to be done efficiently. Technical support teams are used to performing activities with native tools or commands and they may find it difficult to accept an Enterprise Virtual Assistant unless they are educated on its benefits and potential to add value to human productivity. Such measures will help accelerate the speed of adoption and both employees and enterprises can benefit from the same. Industry: Shameeja Theruvath Automation Consultant, Wipro Limited Shameeja is an experienced IT professional with expertise in creating Enterprise Automation Solutions. She has strong technical expertise in Infrastructure Consulting across Data Center Technologies. She is currently working with Wipro HOLMES™ team in designing solutions for Enterprise Automation for customers across business and IT for different industry segments. Financial Services is one of the most challenging industries from a technology standpoint. Digital business transformation is now critical to the survival of virtually every organization, but effective change management must center on people. Successfully implementing automation systems might never be "easy," but platforms and solutions have emerged to make it as frictionless as possible.

=========================----- Arcticle source ----- https://www.wipro.com/blogs/venkiteswaran-perumal/ ----- Contact Wipro Blogs By Author Microservices adoption:Ten pit stops to watch out Please fill the required details to access the content Venkiteswaran Perumal Venkiteswaran Perumal Managing Consultant, Wipro Managing Consultant, Wipro Venki has over 19 years of experience working at every phase of the software development lifecycle specifically in the areas of enterprise application, B2B, API ad microservices integration. He is involved in

business consultation and delivery of mission-critical integration programs that enable systems to handle a large number of business partners and complex data for global clients across industry domains. Organizations' drive toward continuous innovation, agility and scalability is supported by the increased rate of adoption of microservices.

#### Microservices adoption:

#### Ten pit stops to watch out

---- Arcticle source ---- https://www.wipro.com/blogs/venkiteswaranperumal/microservices-adoption-ten-pit-stops-to-watch-out/ ---- About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Microservices adoption: Ten pit stops to watch out December | 2019 Organizations' drive toward continuous innovation, agility, and scalability is supported by the increased rate of adoption of microservices. However, do all microservices adoption initiatives become successful?Lot of times, when an enterprise adopts microservices, it ends up having multiple monolithic applications that complicate the entire system. Below are the 10 areas where an enterprise should pay extra attention in order to achieve success with microservices adoption. 1. Security Security is one of the most important aspects to look at while designing the microservices architecture. Security solutions should ensure that the API Gateway is used by secured microservices, and should be capable enough to handle authentication and authorization of the external/internal callers through the microservices level. Though there are many ways to do this, a delegated authorization (OAUTH) model along with tokens is considered the most efficient and scalable solution for authentication and authorization of callers through microservices. The delegation authorization service (OAUTH) can be used to share permissions across microservices. 2. Services communication and design A robust and efficient interface between services is often a struggle during microservices implementation and more critical when multiple services communicate with each other for completing a single transaction. The solution to this challenge lies in the informed decision one makes during the microservices architecture design phase whether to follow a point-topoint (synchronous) approach or asynchronous approach. Asynchronous messaging wins over synchronous messaging in terms of decoupling, isolation, responsiveness, load leveling, and workflows. It enables communication even when there is no receiver, unlike synchronous workflow, which holds the requests until it receives a response. It is best suited for communication between distributed systems where there is intermittent increase in traffic loads. 3. Data consistency One of the challenging things in an enterprise is maintaining data consistency across business lines. Microservices architectural design plays a vital role in ensuring consistent data flow across applications regardless of the volume

of transactions. Enforcing architecture principles such as avoiding 2 phase commit in a distributed transaction and adopting SAGA pattern with appropriate service operations for rollback etc. are some of the best practices. 4. Service discovery and service catalogue Gone are the days of storing service locations statically in a configuration or property file and amending them whenever there is a change in the location. In a microservices adopted architecture, auto-scaling is enabled in order to meet business needs. This brings in a bit of complexity in locating the services on a network. To have a robust service discovery model, it is important to have a 24x7 available service catalogue/registry configured to hold the service locations. 5. Fault tolerance When the number of microservices and the volume of transactions among them increase, it is possible that one service failure can influence the failure of the entire process. Fault tolerance should be a mandate in microservices architecture design and this can be adopted in multiple ways. One of them is by enabling a circuit breaker, which restricts calling resources when it detects a service failure. Another way is through custom codes, which cautiously fail the services when they are not obtainable. 6. DevOps Enterprises are facing the following key challenges while implementing business functionalities to cope with the market, which is agile and dynamic in nature. Business level A one-stop solution here is to design and implement a strong DevOps pipeline and container-based architecture, which makes the deployment process easy. 7. Distributed logging&debugging: With microservices-based architecture in place, business functions and processes are split into microservices that are distributed across the technology landscape. This makes centralized logging a bit challenging and eventually affects end-to-end visibility, analysis and debugging of transactions and processes. This calls for the need to have a robust transactions logging design in place and leveraging the advantage of single logging features of available products. 8. Tech proliferation Though we see many benefits of microservices-based solutions, they also increase the implementation complexity due to the rise in the number of tools/ technologies. A Solution Architect plays a key role here by having to choose the right product for microservices adoption. Below are the parameters a Solution Architect should look at while choosing the product and design: 9. Testing At times, we run into several challenges in microservices testing. Traditionally, we launch a single WAR file through which we ensure backend connectivity with underlying systems, databases, etc. However, this does not hold well for microservices because of the level granularity and increase in the number of services. Unit testing works well for services with welldefined boundaries. In the case of microservices, it is very tough to define such boundaries and test. Therefore, robust integration testing which is independent of the service behavior with a focus on service intercommunication will help. E.g., Introduction of a new service will require compatibility testing to ensure seamless business operations. Testing automation and service virtualization can also enable effective microservices testing. 10. Monitoring & performance The primary goal of adopting microservices architecture style is to achieve high performance, reliability, scalability and observability. This forces organizations to have a robust monitoring system. Monitoring of hosted platform and services (distributed), and APIs should be in sync with the organization structure. Most of the PaaS product vendors provide necessary enterprise capabilities (such as monitoring, logging, and discovery) which are to be leveraged appropriately.

One should design the monitoring component in such a way that microservices should either push metrics or enable their metrics via pull interfaces to provide real-time statistics. This enables us to observe the overall system's health and help in defining scaling rules. Observability relies on logs, matrices, events etc., which helps us to understand the service controls across the enterprise though it does not have the insight of others. In a nutshell, enterprises adopting microservices can get it right by meticulously managing the above mentioned parameters with technology standards and best practices. Industry: Venkiteswaran Perumal Managing Consultant, Wipro Venki has over 19 years of experience working at every phase of the software development lifecycle specifically in the areas of enterprise application, B2B, API and microservices integration. He is involved in business consultation and delivery of mission-critical integration programs that enable systems to handle a large number of business partners and complex data for global clients across industry domains. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

### **Moving from Customer Relationship**

# Management (CRM) to Customer Experience (CX)

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customer-experience-cx/ ----- About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Moving from Customer Relationship Management (CRM) to Customer Experience (CX) December | 2019 We are all aware of the concept of Customer Relationship Management (CRM). It is a strategy, a process and a system. The departments of a business - where customer information and satisfaction are of utmost importance - totally depend on the CRM process, application and systems. It provides a 360-degree view of the customer and is responsible for defensive marketing strategy to retain existing customers. CRM has its presence in the Marketing, Sales and Service departments of a business organization. However, CRM imposes significant limitations on organizations, which had not been apparent for the past 20 years. These limitations, coupled with technical complications and financial impact, are hindering business efforts to deliver great customer experience. At its core, CRM is a monolithic system, which has not been able to break the silos that exist between various customer-facing departments. It is effectively used in the Marketing and Sales Departments, but fails to deliver the same customer experience in the store management, shipping departments etc. Moreover, CRM systems are not tailored to support new channels or modern communications, such as cell phones and social media channels. With the business world making rapid strides on the digital transformation journey, CRM systems can no longer be used just as a great transaction database. On the other hand, Customer Experience (CX) is a strategy which focuses on the perception of the customer after engaging with the customer or product. In this strategy, the customer is always in touch with the company or brand. That is not limited to Marketing, Sales and Service Departments, but also departments like shipping, packaging etc. For example, a customer would not only like to see on the Web what the status of their order is, but also track the product movement from source to destination, and if there is a question, can quickly chat instantly from the Web with a customer agent. The customer can raise complaints or give feedback through social channels like Facebook, Twitter etc., which informs the customer support call and survey data for the organization and brand. CX focuses on having a healthy emotional connection with customers in every department, and it lays more emphasis on the customer as opposed to the product. Leading the way in enhancing CX is Oracle with its cloud applications - Sales Cloud, Marketing Cloud, Service Cloud, CPO, Oracle Commerce and Content and Oracle Social. Each of these applications focuses on customer experience and helps build a healthy emotional relationship with the same, starting from Customer Data Management, Campaigns, Support, Pricing, Quoting, storefronts on the Web to Social Engagement. The essential principles of both ways interactions between customer and company, engagement of customer in every step of communication, catering to customer needs and wants, and flexibility for the customer to choose, is Customer Experience (CX) in a nutshell. Industry: Abhishek Roy Choudhury Oracle EBS and Service Cloud Functional Consultant, Oracle Practice Abhishek brings 10+ years of experience in building Applications Practices and Solutions and helping clients drive better business outcomes with CRM practices. He holds a Bachelor of Engineering degree from the MVI College of Engineering,

Bangalore. He is a certified Oracle Service Cloud consultant with experience in multiple end-to-end implementations of Oracle EBS and Service Cloud solutions for reputed customers across varied geographic regions and business domains. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to reexamine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

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### Working on the go with Oracle Multi-Platform

#### **Mobile Field Service**

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base etc. Additionally, it has strong transactional capabilities which can all be done even in places with poor network connectivity. FSEs can leverage this data to change the status of tasks, access Google Maps' direction capability to reach the task destination, capture the material, expenses. labor and customer notes in the platform. FSEs can also order and reserve spare parts required to complete the tasks. This platform not only gives the FSE the visibility of parts in their stocks, but also other FSE's stocks. And finally, the FSE can close the transactions with Customer Signature on their mobile platform device. One of the key business benefits of this platform is its ability to work in offline mode, and once the FSE is within network coverage area or at his/her desk, it can sync all this data back to the FSO's ERP system. In today's modern Field Service business process, Offline Mobile Field Service apps reduce the turnaround time for technicians for completion of work. They also provide flexibility to work seamlessly in remote locations with poor network connectivity, without compromising on data accuracy and visibility of the customer and product information. Industry: Abhishek Roy Choudhury Oracle EBS and Service Cloud Functional Consultant, Oracle Practice Abhishek brings 10+ years of experience in building Applications Practices and Solutions and helping clients drive better business outcomes with CRM practices. He holds a Bachelor of Engineering degree from MVJ College of Engineering, Bangalore. He is a certified Oracle Service Cloud consultant with experience in multiple end-to-end implementations of Oracle EBS and Service Cloud solutions for reputed customers across varied geographic regions and business domains. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to reexamine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/nalin-kumar/ ---- Contact Wipro Blogs By Author Hot fix for hot orders Analytics for superior web store performance Please fill the required details to access the content Nalin Kumar Nalin Kumar Senior Architect, Oracle Practice, Wipro Limited Nalin has 19+ years of experience helping customers in solution building, implementations, rollouts, upgrade, pre-sales with product demos, maintenance & support methodologies, and best practices. He has conceptualized and successfully executed key solutions for large customers with a global footprint in hi-tech and manufacturing domains. He has also executed effective solutions and efficient integrations with complex third-party systems with a high customer feedback score. Like any B2B business, the water heater and refrigeration business is always on a short fuse. Product companies are improving their

### Analytics for superior web store performance

----- Arcticle source ----- https://www.wipro.com/blogs/nalin-kumar/analyticsfor-superior-web-store-performance/ ---- About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Analytics for superior web store performance December | 2019 Product companies are improving their customer reach by adding channels. For a leading USbased manufacturer of heating, ventilation, cooling and commercial refrigeration products, that meant using their own web store to reach B2C and B2B customers (like Home Depot). The web store, built on an Oracle E-Business Suite (EBS) platform, was able to deliver a sophisticated and convenient Amazon-like experience for customers. As the manufacturer was expanding their business, they knew that passive approaches to sales, waiting for customers to arrive at their web store, would not work. They needed to proactively reach out to potential customers. This is when the manufacturer realized that they needed to identify who their online customers were, where they came from, what they were looking for, their buying journey, why they were abandoning their carts and what could be done to convert them into buyers and improve wallet share. One simple statistic tells us why it is important for businesses to track and understand these metrics: Cart abandon rates are 42% and organizations can make \$76,000 per \$1 million turnover just through targeted emails to customers who had abandoned their cartsi. This meant ferreting key information related to customers visiting the web store. To implement this, Wipro used Google Analytics as a solution. By embedding Google Analytics into every webpage of the store, it became possible to track a number of business metrics. The sales team could track visitors by day, date, time of visit, region, IP, the search terms they used, the webpages/ products they had browsed, the products they had selected and placed in the cart, their billing, their names and demographics (if they had logged into the site with their credentials), method of payment, their shipping address etc. Once Google Analytics was in place, the manufacturer had access to data that could be used for smart marketing. Not only could they create deals for customers who had abandoned their carts and improve sales but also tell which products appealed to different customer segments thus making it possible to do better product bundling, identify the types of discounts that could improve sales, identify which customers could be offered free shipping based on minimum purchase, and make sales forecasts based on the behavior of customers. While Oracle EBS offers an ERP platform for a worldclass online shopping experience with up-to-date product catalogs, descriptions and quick searches, Google Analytics can be leveraged to intelligently provide customers with better offers, improve conversions and boost sales. The tool provides companies a way to visualize what is happening in their web store so that actionable insights can be extracted

and the customers can be nudged toward completing their transactions. For said manufacturer, the new analytical tool helped in improving conversionrates, average order value, providing data on time of day when customers made purchases (enabling better preparedness in their supply chain and delivery processes). Likewise, other smart organizations can leverage Google Analytics on their ERP platform based web stores to analyze website traffic (organic, email, referral, social, etc.), track the efficacy of their online marketing campaigns, track online sales and revenue, identify customer demographics and shopping behavior to improve the overall performance of their web stores. References: i https:// www.freshrelevance.com/resources/real-time-marketing-report-for-q3-2018 Industry: Nalin Kumar Senior Architect, Oracle Practice, Wipro Limited Nalin has 19+ years of experience helping customers in solution building, implementations, rollouts, upgrade, pre-sales with product demos, maintenance & support methodologies, and best practices. He has conceptualized and successfully executed key solutions for large customers with a global footprint in hi-tech and manufacturing domains. He has also executed effective solutions and efficient integrations with complex thirdparty systems with a high customer feedback score. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

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#### Hot fix for hot orders

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must be applied by morning. The short response times can create chaos in spare part acquisition, planning and logistics. And with many such requests - popularly called "hot orders" -- coming from across geos, the manual paperwork can guickly pile up. Orders can get lost or misplaced and, in unfortunate situations, even forgotten. The manufacturer needed to ensure they had a system that could flawlessly take care of hot orders, without a single one falling through the cracks. Wipro leveraged "Lean" principles and implemented a simple but highly visible solution to mitigate the problem: a large electronic dashboard showing all hot orders, visible to everyone in the shipping area of the plant. All orders are entered into the system (instead of a sheet of paper) and they show up on the dashboard. The dashboard shows critical pieces of information like the quantity of a piece of equipment or component, inventory availability and the urgency of the request. The relevant team knows what actions are to be taken and updates the progress on the system, enabling other teams to know exactly what they need to do. Any obstacles are quickly highlighted thus triggering mitigation steps in minimum time. The dynamic hot order tracker has replaced the traditional paper-based system and teams have now stopped pushing paper "over the wall" from one department to another. Customer requests are not lost, teams can plan better, shipping can be ready for each subsequent event and customer service representatives can provide highly accurate (and immediate) information to customers. They don't need to depend on paperwork to acquire a picture of the status of hot orders—it is clearly visible to them. Wipro has implemented this dynamic hot order dashboard for a leading manufacturer in the US. Mexico and Canada operations are in the pipeline for implementation. Industry: Nalin Kumar Senior Architect, Oracle Practice, Wipro Limited Nalin has 19+ years of experience helping customers in solution building, implementations, rollouts, upgrade, pre-sales with product demos, maintenance & support methodologies, and best practices. He has conceptualized and successfully executed key solutions for large customers with a global footprint in hi-tech and manufacturing domains. He has also executed effective solutions and efficient integrations with complex third-party systems with a high customer feedback score. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/gaurav-savdekar/ ---- Contact Wipro Blogs By Author

www.wipro.com/blogs/gaurav-savdekar/ ---- Contact Wipro Blogs By Author Business Intelligence - Are we back to where it started? Please fill the required details to access the content Gaurav Savdekar Gaurav Savdekar Principal Consultant, Decision Sciences, Data Analytics & AI, Wipro Gaurav has about 14 years of experience in the Data & Analytics domain. He has worked on various BI and analytical tools and has been part of multiple implementations. He has also been involved in providing consultation, drawing up the BI roadmap, and evaluating multiple tools for various clients. New data analytics platforms are utilizing the processing power of source

## Business Intelligence - Are we back to where it started?

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build for high performance analytics storage are Amazon Reshift, Snowflake. Even legacy BI tools like SAP BO, Oracle has come up with their BI versions for cloud. Are we back to where it all started? With cloud platforms built to provide high performance analytics storage, are we again back to guerybased BI tools? Though tools like Qlik, Tableau, Thoughtspot, Incorta are still going strong with their in-memory offerings, there is certainly a strong competition in the form of query-based BI tools. Recent acquisition of Looker by Google puts a stamp on that. Industry: Gaurav Savdekar Principal Consultant, Decision Sciences, Data Analytics & AI, Wipro Gaurav has about 14 years of experience in the Data & Analytics domain. He has worked on various BI and analytical tools and has been part of multiple implementations. He has also been involved in providing consultation, drawing up the BI roadmap, and evaluating multiple tools for various clients. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the source ----- https://www.wipro.com/blogs/satavisha-mukherjee/ ----- Contact Wipro Blogs By Author How to control bias in AI Please fill the required details to access the content Satavisha Mukherjee Satavisha Mukherjee Partner, Analytics & AI Consulting, Wipro Satavisha is a Data Consumption Strategy Consultant based out of Dubai, UAE with 15 years of experience in the decision science and predictive analytics domain. She specializes in use cases consulting, data consumption strategy, and data science use cases delivery across domains. She has worked extensively in customer analytics and supply chain analytics domains across industries like retail, banking, pharma, manufacturing, aviation and utilities. Designing ethical & unbiased 

#### How to control bias in AI

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these algorithms work in an inclusive and unbiased way. Unlike technical errors in systems, problems with AI-related bias are not clearly visible to the eyes, which makes it more challenging to identify. Without a meticulously governed approach, AI algorithm might implant unconscious bias in decision-making and it might affect us in unfathomable ways. Strong vigilance and governance starts with awareness. It is very important to know the types and sources of AI biases to combat these with the right measures. What is AI bias? AI and machine learning algorithms observe trends in data and form associations through pattern recognition and then use the established patterns to solve complex problems. Some of the most common application areas of these models are - loan approvals, target marketing, talent evaluation etc. In traditional programing, the developer usually hard-codes as a solution to get a definitive solution, but machine learning algorithms learn the patterns from data. As the algorithms gets trained by data and data scientists, the decision it recommends are often affected by the inherent bias from the data itself and the individuals who are training the algorithms. Related article - Are AI solutions being influenced by our own biases? Bias in AI: Types and solutions Sample / Selection Bias This occurs when the collected data does not represent the whole population. A common example of this can be a voice recognition based system failing to understand certain language accents due to the training sample not being representative enough. Another example can be a machine-learning model for scanning résumés or university applications mistakenly screening out certain applicants with specific subject combinations if the historical data never reflected the same combinations. Solution - As these types of biases primarily come from the training data sets, most effective way to solve this is to make the training data as inclusive as possible. A strong governance process during data collection and training stage that ensures most of the possible scenarios are considered should help in reducing this bias. Frequent updates of training data sets are also important to keep it time-relevant and include new possibilities. Related article - The need for AI to sense, think, respond and learn without bias Interaction Bias When a system is trained using streaming data based on a live interaction of a group, it instils the bias that exists in the group. As experimented by Google, when they asked a group of people to draw shoes for the computer, most people drew one that they were more familiar with. resulting in the computer not recognizing some specific types of shoes. Interaction bias sometimes leads to serious consequences like the Microsoft chat-bot picking up offensive language based on streaming tweets. Solution - Interaction bias is not easy to detect as it comes from streaming interaction. It is important to exercise caution for such training process and apply constant checks on algorithms and its output. Implicit / Latent bias This occurs when assumptions made based on one's own mental models and personal experiences influences algorithm development that do not necessarily apply more generally. As an example, prejudice against candidates from specific localities and nationalities might result in lower credit scores for them due to latent bias of the individuals developing the model. Similarly, opportunities of specific racial and demographic segments can be downgraded in an automated resume selection process due to similar prejudices. In many cases, persistent latent bias leads to sample / selection bias as it historically deters use of inclusive data points in the model. Solution - A balanced and diverse team bringing in different thoughts,

approaches and background helps to push for holistic and unbiased data samples driving a more robust solution design. In addition, a strong and ethical governing committee can ensure close vigilance to constantly rule out any possible exclusions inflicted by individual ideas. Measurement Bias Measurement bias is the outcome of unwanted noise resulting in faulty measurement. Most of the time it results in systematic distortion of data. The distortion could be the fault of a device or consistent noise getting into measurement process. A camera with a chromatic filter will generate images with a consistent chromatic bias. A faulty temperature measurement system for gas turbine will systematically distort temperature to fault relationship. Another possible source for measurement bias can be the method of measurement. In case of survey analysis, random errors are caused by unintended mistakes by responders or interviewers during collection of data. Solution - To avoid measurement bias, the data inputs coming from any device should be validated properly comparing outputs from multiple measuring devices in different times to ensure the measurement is accurate. It is also important to ensure a consistent method and environment during measurement process to rule out any random or systematic noises introduced by individuals or the environment. Training the team measuring and labeling the data is very important to avoid any human led measurement bias. Related article - Testing of AI/ML based systems Tackling bias in AI systems Any conscious or unconscious bias can influence the self-learning AI system and affect decisions in unpredicted ways leading to unfavorable outcomes. To avoid this, it is essential to plan for prevention techniques and human judgement in unison. The need is to push for robust statistics, large and inclusive data samples, and algorithm performance indicators to safeguard the solution technically. Critical checkpoints should be applied and exercised closer to the data sources, devices, and resources who are involved in developing the algorithms. The onus is on Strategic Governance to ensure that insights using data-driven algorithms are robust and free from unwanted bias and exclusions. Related article - How to address shortcomings in AI to build trust Industry: Satavisha Mukherjee Partner, Analytics & AI Consulting, Wipro Satavisha is a Data Consumption Strategy Consultant based out of Dubai, UAE with 15 years of experience in the decision science and predictive analytics domain. She specializes in use cases consulting, data consumption strategy, and data science use cases delivery across domains. She has worked extensively in customer analytics and supply chain analytics domains across industries like retail, banking, pharma, manufacturing, aviation and utilities. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. www.wipro.com/blogs/swagata-de-khan/ ---- Contact Wipro Blogs By Author 17 reasons to build serverless data lake on AWS How to avoid pitfalls in

building serverless data lake on AWS Please fill the required details to access the content Swagata De Khan Swagata De Khan Senior Architect - Data, Analytics & AI, Wipro Limited Swagata has over 20 years of data warehouse experience and has successfully executed large engagements for global MNCs. He is an AWS certified Solution Architect and currently focuses on solutions involving Cloud, Integration Technologies, Artificial Intelligence and Machine Learning. Data Lake is highly relevant as a single repository of data in original source or raw format for the entire enterprise. In the article 17 reasons to build serverless data lake on AWS, we have seen the importance of having a data lake on AWS cloud using serverless components instead of an on-premise solution.

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#### How to avoid pitfalls in building serverless

#### data lake on AWS

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PrestoDB cluster under the hood and costs \$5 per TB scanned. If the organization has only a few queries to run per day, Athena is a great choice. But if the data scan volume is higher, more frequent and regular in nature, running own presto cluster on AWS turns out to be a cheaper option. The Restrictions Many serverless components come with significant limitations and restrictions. The maximum execution time limit for a lambda is 900 second, the maximum memory size is 3 GB and maximum size of deployable code is 50 MB. The Athena is based on 0.172 version of Presto engine and from that time onward, around 70 more releases of Presto have taken place broadening its functionality and increasing performance to much larger extent but no such upgrade has taken place for Athena. As a result, a large number of Presto functionalities does not exist on Athena. Similarly, Glue gives only one standard node configuration option while multiple configurations with a much larger variety of tool sets exists for EMR. Glue also have lesser functionality and built-in components and libraries compared to EMR. Moreover, EMR can run native spark code as is but small modifications are needed to run on Glue requiring around 5 to 10% extra effort for conversion of code to and fro. Finally, purpose-built enterprise ETL and Visualization tools like Informatica, DataStage, Denodo, Tableu etc, provide a lot more features, functionalities, availability of ready-made connectors for diverse data source systems and overall ease of use for DevOps team in their narrow areas of usage compared to AWS serverless components. Many of these tools are available directly via AWS marketplace and have integrated quite well within AWS ecosystem. All the above need to be kept in mind while making architectural decisions. This list is no way exhaustive and a huge number of such limitations exist. Recommendation: Again, a judicious mix of serverless, non-serverless and non AWS components gives the best result for a large organization with higher IT capabilities. While architecting, always think with serverless design first but be ready to switch to other options if the cost-benefit analysis points so. The Performance The infrastructure provisioning of serverless components happens on demand and hence almost always end up with a higher initiation time because unlike the dev team, AWS, as infrastructure provider, does not have much idea about the usage pattern of the application in advance. While in some case the time is miniscule eg. a few milliseconds for a lambda function, the Glue job is on the other side of the spectrum where it typically takes 10 to 15 minutes to start execution and that time must be budgeted for in the overall completion time. Same is the issue with scaling up and down, there is always a lag because the response is reactive in nature. While the reaction time is far less than any human can even think of, it is still no substitute for the knowledge of the application developers about its intended usage time and expected volume. Recommendation: Multiple solutions exist for these issues; one common approach is a pre warm up routine to provision infrastructure in advance when faster response is needed. The architect and developers must be aware of these intricate details and take appropriate mitigation or avoidance approach. The DevOps team The common orchestration, monitoring and debug tools in AWS cater for a far larger mixed use case of IT systems. This means traditional data analytics developers need to adopt to a different set of tools than they are typically used to. Also, in case of serverless, they do not have direct access to the underlying infrastructure components, making testing and debugging far more complex. Hence, there is a significant learning curve for developers

coming from traditional analytics world. On top of this, AWS provides significant low level powerful capabilities in the hand of developer with cost per usage. Any inexperienced developer creating non-optimal code will incur significant higher cost and get lesser performance from the system. Example, adding columns that are not required for the end result in an Athena guery would increase the cost many fold for higher amount of data scan. Glue execution is charged in 10 minutes' slab and inefficient Glue code resulting in unnecessary data shuffle would cause both higher execution time and much higher cost. The minute attribution of cost on various parameters requires deep knowledge of AWS as well as high level of past experience on data lake platforms to estimate the cost upfront. For example, cost for S3 usage depends not only on the volume of the data but also on number of read/write request and amount of ingress and egress of data. DynamoDB cost depends on volume of data, index, cache, on-demand and scheduled backups as well as number of read, write and restore operations etc. This kind of minute cost attribution is good for accountability but makes the task of estimation that much complicated and specialized. Recommendation: There is no magic bullet to avoid the above other than deep knowledge and experience in this area. Mature IT organizations and service providers have built re-usable accelerators and frameworks with best practices based on experience to reduce or eliminate the chances of mistake. Partnering with them increases the chance of success manifold. Conclusion Serverless created a huge excitement when it first appeared on the scene via S3 and Lambda. However, not all the pitfalls were apparent and many early adopters have been badly burnt. Over the years, the service offerings and knowledge around them has matured and now, with experience partners, the true benefit of the serverless data lake on AWS can be realized deftly avoiding the pitfalls and traps. Once deployed, this is one of the key ingredient for continued success of an organization evolving over a period of time and still remaining relevant by bringing in new insight time and again. Industry: Swagata De Khan Senior Architect - Data, Analytics & AI, Wipro Limited. Swagata has over 20 years of data warehouse experience and has successfully executed large engagements for global MNCs. He is an AWS certified Solution Architect and currently focuses on solutions involving Cloud, Integration Technologies, Artificial Intelligence and Machine Learning. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force.

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#### 17 reasons to build serverless data lake on AWS

----- Arcticle source ----- https://www.wipro.com/blogs/swagata-de-khan/17reasons-to-build-serverless-data-lake-on-aws/ ---- About the Author Contact Wipro Related Blogs AI Driving 5G Innovations for Communications Service Providers Making ML Models in Banking Resilient using Adversarial Attacks Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Please fill the required details to access the content 17 reasons to build serverless data lake on AWS Data Lake is highly relevant as a single repository of data in original source or raw format for the entire enterprise. The data from data lake is used as source for various purposes in the organization like reporting, analytics, compliance, visualization, machine learning etc. Data lake includes different types of data - both text and binary. It also includes data in various formats like log, csv, json, xml, parquet etc. Data is usually loaded into data lake "as is" without any transformation. It is stored in various mediums like file system, RDBMS, NoSQL database, graph database, time series database, block chain ledger database, in memory cache database and analytical database. Any transformation of the "as is data" is done as per the need of consumption side downstream to data storage changing the paradigm from ETL (Extract, Transform and Load) to ELT (Extract, Load and Transform). Data Lake is important because: Why on AWS? Enterprises are increasingly moving away from creating data lakes on premise to public cloud (particularly on AWS). Some of the reasons are: Why serverless? Serverless architecture is a new deployment paradigm where application components get deployed on compute infrastructure only at the time of usage. The compute infrastructure is owned and operated by the cloud provider, thus removing all burden of server procurement, configuration and management from the customer. Over the last couple of years, the serverless architecture has gained significant ground and there is an increasing trend to deploy applications in serverless fashion. The data lake is not outside this pattern. In fact, the intrinsic nature of data lake gives various unique advantages when deployed as a serverless architecture. The advantages include: All such tools are essential to develop and manage a data lake and if they were not serverless, it would have costed a lot due to high idle time. To conclude A modern organization has to use every advantage at its disposal to survive and thrive. No organization today can ignore the wealth of data at its command. A data lake gives unmatched flexibility for unlocking the analytics potential of data. Creating a serverless data lake on AWS is the most optimal path in that journey. Industry: Swagata De Khan Senior Architect - Data, Analytics & AI, Wipro Limited. Swagata has over 20 years of data warehouse experience and has successfully executed large engagements for global MNCs. He is an AWS certified Solution Architect and currently focuses on solutions involving Cloud, Integration Technologies, Artificial Intelligence and Machine Learning. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is

a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force.

### Making payroll migration painless, flawless and timely

---- Arcticle source ---- https://www.wipro.com/blogs/sunil-kumar/makingpayroll-migration-painless-flawless-and-timely/ ----- About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Making payroll migration painless, flawless and timely January | 2020 Organizations that adopt a new payroll system know that things can go wrong. In fact, there is rarely a 100 percent match of employee data for gross pay, pretax, voluntary and statutory tax deductions, etc., between the existing system and the new one. The margin of error can be quite large, often with as many as 70 percent of the records not matching. This is not tenable. Therefore organizations need to conduct a comparison of data between the two systems, the old and the new, to ensure and prove that payroll is being calculated accurately. This makes the role of Parallel Payroll Testing a critical aspect in new payroll implementation. Parallel Payroll Testing compares the data in the new system with that in the legacy systems and provides assurance that they are nearly the same. It is not necessary that every component of payroll from both systems be identical—but the differences should be known, explainable and within an acceptable and predetermined range. In addition, when variance in an employee's data is identified, it should be possible to isolate the component (was it bonus, commissions, overtime, child support, dental deduction, etc.?) that is at variance. Planning delivers perfection (always!) Achieving this requires planning. In some countries, salary components are straightforward, whereas in others they can be extremely complex. Therefore, the implementation of a new payroll system depends on local regulations and

the number of employees. In USA, for example, tax varies across every state, county, city, school district and locality. It is like dealing with 52 different countries. Which is why planning for Parallel Testing is an important prerequisite. It has been learnt that the first cycle of comparison generally shows large discrepancies. This is because of a variety of reasons such as conversion issues, payroll calculation customizations, wage basis rules, etc. Hence, it is recommended that organizations plan for a minimum of three Parallel Payroll Testing iterations following seven steps: The real challenge of reconciliation - and a tool to simplify it Many organizations perform payroll comparison using Excel. This can be an uphill task. For example, given the nature of taxation in the USA, you would expect an average 100 rows per employee extracted from both systems. Now imagine doing a comparison for 50,000 employees. Excel would need to compare half a million rows. In such a situation, it is imperative to use a reliable tool. Wipro has built a Parallel Payroll Testing tool that eliminates manual comparisons. The entire activity of data extraction, transformation and creating comparison reports at summary and granular levels is automated by a comparison engine. The summary level reports show the number of employees that have a mismatch in gross or net salaries; the granular report identifies the salary component(s) in which the mismatch has occurred. For instance, a global healthcare and diagnostics services provider in USA leveraged during the migration of their payroll to Oracle HCM Cloud. The organization saw significant reduction in time taken for payroll testing. Comparisons for over 50,000 USA employees, that would take 4 months using Excel, had been completed in 2.5 months, delivering an effort saving of 40 percent. Apart from the savings on time and effort, the tool ensures organizations can be confident that employees will not be impacted and statutory guidelines and conventions will not be violated - assuring a satisfactory migration of their payroll systems. Industry: Sunil Kumar Oracle HCM Solution Architect, Cloud Enterprise Platforms Practice Sunil brings 14+ years of experience in Oracle Applications HCM Consulting, Implementation, Upgrade and Product Development. He holds a Bachelor of Technology degree from the Indian Institute of Technology, Roorkee. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/mayur-khatwani/ ---- Contact Wipro Blogs By Author The Key to Managing a Crisis: Your Enterprise Data Are Australian firms making a mistake with RPA? Please fill the required details to access the content Mayur Khatwani Mayur Khatwani Head - Enterprise Operations Transformation - APAC, Wipro With an experience of over 16 years, Mayur has transformed operations for several clients resulting in a significant uplift in their ways of working. He has a strong understanding in Robotics, Analytics, and AI, and enjoys sharing his insights with customers. He has successfully created winning teams in organizations, by offering a range of

automated solutions. Working across different products and technologies,

Mayur is also spearheading Wipro's state of the art Automation Lab in Melbourne. To Manage the Unmanageable and Unimaginable, Leverage Enterprise Data In 2018, Gartner reported that Australia's Robotic Process Automation (RPA) industry had registered ~2x growth over the previous year, seeing a 48 per cent rise in total revenues.

## Are Australian firms making a mistake with RPA?

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comes to taking RPA related decisions, it's imperative to look at the entire value chain before even beginning to decide what and how to automate. Business decision makers need to look beyond cost and think of RPA's contribution to operational efficiency, productivity, customer experience, quality, accuracy, compliance, and insights. Myth #3: Implementing RPA inhouse will save money While the larger automation market and RPA in particular has flourished in Australia, the skills and capabilities to manage projects are not yet mature. Many businesses that have taken up RPA projects in-house have realized it. In-house projects are often approved due to a misconception that outsourcing RPA projects will be expensive and more often than not this thought process leads to failure. Only about 10% of businesses have successfully implemented RPA in-house. There are several factors at play here; firstly, the lack of mature skillset within an organization. Just because an organization have a few people experienced in a technology does not mean they can do the entire implementation in-house. An experienced partner brings in industry and domain experience and best practices that can go a long way in ensuring the right approach. Secondly and more importantly, you get to tap into their overall skillset and broader resource pool. While doing it yourself, the lack of this experience means that the business could potentially pick up unsuitable processes for automation. Processes that are very dynamic or require a human touch may not be ripe for automation. Applying a cost lens to these processes could result in failure and reduced ROI. And finally, in-house development requires investment in technologies that are rapidly evolving. This means an upgrade every 12 months or so. Engaging a vendor helps avoid this technology lockin and also reduces risks. RPA projects are doable in-house. But making that decision should not be solely a factor of cost. The end outcome of a badly executed in-house project could turn out to be vastly more expensive than engaging an RPA partner or SI. There are substantial benefits of RPA that make it a game changer in today's world and critical for Australian businesses to invest in it. A successful RPA implementation can show up to 5x improvements in as less as three months with 100% accuracy to boot. The key to successful RPA transformation is setting the right expectations, getting the leadership buy-in, and getting the right partner on board to guide this journey. To showcase live examples of the above narrative and to experience live coding of Bots, we have recently opened our first automation lab in Melbourne. To know more about the lab and our capabilities write to me at mayur.khatwani@wipro.com Industry: Mayur Khatwani Head -Enterprise Operations Transformation - APAC, Wipro With an experience of over 16 years. Mayur has transformed operations for several clients resulting in a significant uplift in their ways of working. He has a strong understanding in Robotics, Analytics, and AI, and enjoys sharing his insights with customers. He has successfully created winning teams in organizations, by offering a range of automated solutions. Working across different products and technologies, Mayur is also spearheading Wipro's state of the art Automation Lab in Melbourne. Part 3: What Are the Architectural Aspects of Edge Devices Needed for Deep Learning? The 3 pillars of Enterprise Architecture are Alignment, Insight and Quality. Innovation management as the new competitive advantage

#### The Key to Managing a Crisis: Your Enterprise Data

----- Arcticle source ----- https://www.wipro.com/blogs/mayur-khatwani/tomanage-the-unmanageable-and-unimaginable-leverage-enterprise-data/-----About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content The Key to Managing a Crisis: Your Enterprise Data May | 2020 Business processes at every organization are being stress-tested, and many are failing under the pressure. Recently, an airline call center was hit with a tsunami of irate customers, demanding to redeem their frequent flyer miles. The airline did not have enough staff to deal with this scenario, and hurried layoffs left them with no option to manage customer calls, never mind the resulting PR crisis. But how could the airline have possibly imagined what would happen? The answer is Enterprise data. Organizations know far more than they realize about how to manage through this crisis, but few are properly set up to access it. The crisis has heightened the urgency of becoming an Intelligent Organization By now every organization fully understands the importance of data. Yet this crisis has revealed the risks of taking a too-slow approach. Hindsight, of course, is always perfect. Still, imagine how much stronger any given organization would have been if they had data to help them define critical vs. non-critical activities, predict the impact of the crisis, automate tasks that could run even without human intervention, and prevent disorganized mass layoffs that inevitably mean losing some of the organization's best talent. Insights on past performance, system utilization, best practices and more could have helped businesses improve methods of working and make better decisions on automation, digitalization, and more. If we imagine a perfectly intelligent organization with 5 years' worth of data - on thousands of employees and what they do every day - a simple process mining tool could have helped almost instantly highlight workable automation possibilities. Steps you can take today 1. Move beyond structured data. In our practice, we see that even organizations well on their automation journey prefer to automate using structured data. The reluctance to embrace OCR and AI leads to unstructured data being underutilized in inefficient processes and workflows. That's almost 80% of organizational data that's being underutilized! The perceived safety of limiting automation to structured data has higher downstream costs than people realize. For example, in a recent discussion with a client, it was clear that while they had made great progress - automating 40 processes in a single year using RPA - it was equally clear that initiative would have delivered stronger results had the unstructured data been included in the automation journey. By the time they realized that AI could have helped automate unstructured data, they had already lost most of it and diluted the remaining. Concerns about unstructured data use is one reason globally, less than 10% of organizations have been able to make the most of AI. Organizations can, and should, do better. 2. Leverage process mining tools Even if you haven't utilized your data to the fullest in the past, it's not too late to install process mining tools.

In as little as three days, data mining tools can monitor employee activity to generate detailed process maps highlighting each keystroke and collect enough data to identify automation opportunities. This will help solve business challenges, as well as help people, improve their productivity by taking away efforts in redundant and repetitive tasks. At Wipro, we are working with our clients to help them identify how to best use their data to reduce costs and improve efficiencies with our Enterprise Operations Transformation (EOT) framework. For instance, with one of our US clients, we automated a highly complex process within 7 days - all remotely helping them run their order management, customer /supplier MDM, and sales/revenue processes. This ensured business continuity while saving up to \$4Mn in costs. Now is the moment to get future-ready Naturally, everyone hopes this will be the last pandemic, and the last crisis. But hope is not a strategy. To prepare for every eventuality, organizations need data. It will even help businesses prepare for the aftermath of this crisis - taking right decisions to support recovery. While capturing data is the need of the hour, what organizations do with this data will play a crucial role in how they perform over the next 2-3 years. To learn more about how to leverage your business data, connect with me at mayur.khatwani@wipro.com Industry: Mayur Khatwani Head - Enterprise Operations Transformation - APAC, Wipro With an experience of over 16 years, Mayur has transformed operations for several clients resulting in a significant uplift in their ways of working. He has a strong understanding in Robotics, Analytics, and AI, and enjoys sharing his insights with customers. He has successfully created winning teams in organizations, by offering a range of automated solutions. Working across different products and technologies, Mayur is also spearheading Wipro's state of the art Automation Lab in Melbourne. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/satvam-santosh/ ---- Contact Wipro Blogs By Author Charting a new path for IT infrastructure in the aftermath of the COVID-19 pandemic Key considerations in building a Disaster Recovery strategy Please fill the required details to access the content Satvam Santosh Satvam Santosh Open Innovation Consultant, Wipro Satyam is part of Open Innovation team, CTO Office in Wipro. He works with global innovative startups to build go-to-market partnerships. His current focus is on startup ecosystem related to cloud and infrastructure services. He holds a Master of Business Administration degree from Indian Institute of Technology, Madras and pursued bachelor's degree in Computer Science from University of Delhi. He can be reached at satyam.santosh1@wipro.com. It is almost a year since the onset of the COVID-19 pandemic and everything, including the way we do business and how we communicate has changed. No industry and sector have remained unscathed. In this blog, we examine the transformation in IT infrastructure as a result of the pandemic. We also discuss the way forward to improve business resiliency and continuity. This

#### Key considerations in building a Disaster Recovery strategy

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any reputation loss. Hence, it is imperative to have an efficient Disaster Recovery plan for all businesses, no matter how small or big. Industry: Satyam Santosh Open Innovation Consultant, Wipro Satyam is part of Open Innovation team, CTO Office in Wipro. He works with global innovative startups to build go-to-market partnerships. His current focus is on startup ecosystem related to cloud and infrastructure services. He holds a Master of Business Administration degree from Indian Institute of Technology, Madras and pursued bachelor's degree in Computer Science from University of Delhi. He can be reached at satyam.santosh1@wipro.com. To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. Salesforce offers an incredible range of functionalities, making it difficult to find.... A report from Forrester predicts up to 20% of Fortune 500 companies will not make it through 2021 intact. "[For] some, their assets will be dissolved or purchased; others will just go out of business." One possible cause of this is a lack of strategy when investing in and utilizing technology. "The pandemic revealed the flaws in many companies' technology...and their tech leaders were found mired in Band-Aids like tech modernization, simplification, and consolidation."

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# Charting a new path for IT infrastructure in the aftermath of the COVID-19 pandemic

----- Arcticle source ----- https://www.wipro.com/blogs/satyam-santosh/ charting-a-new-path-for-it-infrastructure-in-the-aftermath-of-the-covid-19pandemic/ ---- About the Author Contact Wipro Please fill the required details to access the content Charting a new path for IT infrastructure in the aftermath of the COVID-19 pandemic February | 2021 It is almost a year since the onset of the COVID-19 pandemic and everything, including the way we do business and how we communicate has changed. No industry and sector have remained unscathed. In this blog, we examine the transformation in IT infrastructure as a result of the pandemic. We also discuss the way forward to improve business resiliency and continuity. Before diving into the disruptions caused by the virus, let us take a look at the different components and types of IT infrastructure. IT infrastructure typically includes hardware, software and networking. The type could be traditional, cloud or hyper converged infrastructure. Most companies had migrated to cloud, either partially or completely, before the pandemic. This is evident from the total expenditure in cloud infrastructure, which went up from US\$78 billion in 2018 to US\$107 billion in 2019 (approximately 37% growth), according to Canalys Cloud Channel Analysis January 2020. Effects of the pandemic on IT infrastructure The pandemic brought about widespread quarantines and travel restrictions. Organizations had to let their employees work remotely and deploy their business continuity plans. However, these business continuity plans were not designed for such a situation; they typically accounted for operational continuity in case of disasters, outages and cyberattacks. In spite of such issues, organizations

quickly made the necessary changes. A survey by McKinsey found that in case of remote working, companies moved 40 times more quickly than they thought possible before the pandemic, i.e. time required to implement remote working and increase collaboration went down from the expected 454 days to 10.5 days. Apart from operational difficulties, there were many IT issues at hand. Most organizations did not have a tech stack in place to implement remote working at this level. IT teams had to ensure that the endpoints were completely secure, connected to the company backbone network and always updated as sensitive data started piling up on the remote devices. The gaps in the IT systems led to a massive wave of ransomware attacks. Check Point Research found a 50% increase in the daily average of ransomware attacks in Q3 2020, compared to the first half of the year. As a result of this, most organizations had to increase their spending on Unified Endpoint Management (UEM), endpoint backup, Zero Trust Network Access (ZTNA), and endpoint security tools. In the long term, this will lead to increased demand for security solutions. A positive trend observed in the IT infrastructure space is the adoption of cloud. Cloud provides on-demand, scalable and cost-effective resources for organizations and the pandemic has reconfirmed these benefits. It is helping organizations to ensure business continuity and expedite their digital transformation while lowering infrastructure and storage costs. Gartner predicts that by 2024, the proportion of IT spending in cloud will be 14.2% of the total global enterprise IT spending, up from 9.1% in 2020, in the aftermath of COVID-19. Even during the pandemic, a survey by McKinsey found that there was 24fold increase in the speed of migrating assets to the cloud. Even after this pandemic is over, the shift towards cloud will certainly continue with extreme rigour. Moreover, increasing cloud adoption is beneficial for all the stakeholders involved - Cloud Service Providers (CSPs), Managed Service Providers (MSPs) and customers. Leveraging the pandemic as a strategic opportunity The COVID-19 pandemic has been a tipping point for all businesses. The IT strategy for most organizations has undergone a paradigm shift, and the changes are here to stay. Hence, CIOs and CISOs need to keep the momentum going and proactively experiment with new technologies to build a highly available, resilient and scalable IT infrastructure. Having survived the global disruption, the next important activity organizations need to focus is on building a long-term plan that accounts for such untimely and sudden events. There are a few things to keep in mind: Satvam Santosh Open Innovation Consultant, Wipro Satvam is part of Open Innovation team, CTO Office in Wipro. He works with global innovative startups to build go-to-market partnerships. His current focus is on startup ecosystem related to cloud and infrastructure services. He holds a Master of Business Administration degree from Indian Institute of Technology, Madras and pursued bachelor's degree in Computer Science from University of Delhi. He can be reached at satyam.santosh1@wipro.com. www.wipro.com/blogs/saurabh-aggarwal/ ----- Contact Wipro Blogs By Author Best Practices in Software Testing to Improve Efficiency From secure to secret: Ensuring data privacy using differential privacy Please fill the required details to access the content Saurabh Aggarwal Saurabh Aggarwal PDEng Managing Consultant, Data Analytics & AI Consulting Saurabh is a data scientist involved in driving business value by using AI/ML techniques in diverse industry use cases. He is passionate about solving real business

#### From secure to secret:

#### Ensuring data privacy using differential privacy

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DP not only promises that anyone seeing the result of analysis will essentially drive the same inference about any individual's private information, whether his/her private information is included in the input or notiii but also guarantees privacy protection against a wide range of privacy attacksiv. Wipro's crowdsourcing platformy, Topcodery, uses the power of the crowd to help enterprises replicate their data in such a manner that it not only breaks the ability to reverse engineer, but also preserves the key relationships within different datasets using DP techniques. Just with a small subset of input data, Topcoder's crowd can rapidly develop machine learning models to create fully-privatized and unidentifiable datasets which allow organizations to share their data outside of their territory while maintaining its privacy and ensuring mitigation of financial, reputational and operational risks eventually. Current applications of differential privacy Almost all techdriven companies are experimenting with differentially private implementations. Organizations like Google, Apple, Facebook, Uber, Netflix, are using DP techniques to protect their users' sensitive information, events, location etc. For instance, Google has recently developed the RAPPOR system, which applies differentially private computations to gather aggregate statistics from chrome browser users. The system allows Google team to monitor the wide-scale effects of malicious software on the browser settings of its users, while guaranteeing strong privacy to individualsvi. With launch of iOS 10, Apple is using local DP to protect the privacy of user activity in a given time period, while still gaining significant insights to improve the intelligence and usability of features such as: QuickType suggestions, Emoji suggestions, Health Type Usage (iOS 10.2) etcvii . To address potential for risk for data abuse, Facebook is working towards to employ DP techniques to build the URL database, which includes links that have been shared on the social network by multiple unique users with their privacy settings set to publicviii. In cooperation with the University of California at Berkeley and DP technique, the real time ride-hailing app Uber, recently released an open-source tool allowing it and other companies to set limits on the number of statistical queries Uber staff can conduct on traffic patterns and drivers' revenueix. Microsoft has been applying DP techniques to mask the location of individuals in their geolocation databases to maintain privacy of its usersx. Practical considerations While DP is gaining momentum in practical scenarios and is proving to be a 'gold mine' of data privatization, the guestions related to the level of accuracy vs privacy need to be addressed. Every time a user hits the database, the total 'leakage' increases and as and when further gueries are made, this leakage could start adding up, which compromises data privacy. The more information a user intends to 'ask', the more noise has to be injected in order to minimize privacy leakage and when more noise is added to the data, the less useful it becomes. So, there is always a fundamental trade-off between accuracy and privacy, which could compromise the training and performance of ML models eventually. While there are quite some DP techniques which attempt to maximize the accuracy of the computation while keeping privacy constraint, there could be some product requirements where accuracy is a constraint, and privacy can be compromised. Organizations would need to work on designing the perfectly balanced differentially private mechanism for each use case to attain a good privacy-utility trade-off. References ihttps://journalprivacyconfidentiality.org/index.php/jpc/article/view/405 iihttps://dminc.com/blog/all-you-need-to-know-about-differential-privacy/

iiiKobbi Nissim, et al. Differential Privacy: A Primer for a Non-technical Audience. February 14, 2018. ivCynthia Dwork and Aaron Roth. The algorithmic foundations of differential privacy. Foundations and Trends in Theoretical Computer Science, 9(3 4):211-407, 2014. vhttps:// www.topcoder.com/vihttp://googlepolicyeurope.blogspot.com/2015/11/ tackling-urban-mobility-with-technology.html, http://www.wired.com/ 2016/06/apples-differential-privacy-collecting-data/viihttps:// www.apple.com/privacy/docs/Differential Privacy Overview.pdf viiihttps:// thenextweb.com/facebook/2019/04/30/how-facebook-plans-to-keep-yourdata-private-while-opening-it-up-to-researchers/ixhttps://iapp.org/news/a/ uber-becomes-the-latest-company-to-embrace-differential-privacy/xhttps:// demystifymachinelearning.wordpress.com/2018/11/20/intro-to-differentialprivacy/ Industry : Saurabh Aggarwal Managing Consultant - Data Analytics and AI Consulting practice, Wipro Saurabh has over 12 years of experience in leading data science and AI projects across industries. He holds PDEng (Professional Doctorate in Engineering) from TU/e, Netherlands and Master of Technology from IIT Kanpur, India. Saurabh can be reached at saurabh.aggarwal2@wipro.com 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. \_\_\_\_\_

### Best Practices in Software Testing to Improve Efficiency

----- Arcticle source ----- https://www.wipro.com/blogs/saurabh-aggarwal/bestpractices-in-software-testing-to-improve-efficiency/ ----- About The Author(s) Contact Wipro Please fill the required details to access the content Best Practices in Software Testing to Improve Efficiency March | 2021 Software testing has undergone dramatic change. From the adoption of agile methodologies to DevOps delivery, the IT industry is looking for fast implementation cycles with high-quality results. While CTOs want to avoid problems that could surface after the release, the Project Management Office (PMO) is looking for ways to get things moving quickly. This becomes a challenge for testing teams: get development into production with minimal defects. For business stakeholders, the priority is to identify and manage risk before testing begins. Risks like short timelines, inadequate resources, volatile requirements - or even an unexpected situation like COVID-19 need a forward-thinking approach. Advanced planning and better mitigation strategies ensure all risks are addressed well in advance. To achieve delivery targets, it's critical to select the right testing strategy. Improve

Quality with Testing Best Practices There is no doubt that testing is a pivotal element in the software-delivery process. In fact, it already costs businesses a fortune: one study from Cambridge University found that software bugs cost the economy more than \$300 billion per year. While there is no "golden rule" to follow, there are a few software testing best practices that could ease testing and help organizations deliver defect-free output within reasonable timeframes. For instance, a context-driven testing approach could help testing teams prioritize testing order, make the testing process easier, and deter pushing testing to the last minute. The testing team could follow these best practices to improve the software testing process and increase the quality of software products: Larger risks could sabotage longterm projects and therefore require immediate attention. A risk-based testing approach could help find and prevent defects early in the software delivery process. It allows quality improvement by moving high-risk tasks to the "left" so they can be planned early in the lifecycle. Use Risk-Based Testing to Identify, Prioritize and Manage Testing Risks One test principle that encompasses the above best practices is risk-based testing (RBT). RBT assesses the probability of risk based on the complexity, criticality, usage frequency, defect prone areas, and more. It prioritizes testing particular features, modules, or functions based on the impact and likelihood of failure. This helps plan for the biggest risks. RBT can identify big risks well in advance; for example, identifying the failure risk of a particular functionality in production and its impact on the business by using a prioritization technique for test cases. RBT is a proven method of identifying crucial and important tests from both the customer and business perspective through a "Risk Analysis" procedure. RBT also helps plan highpriority items and catch failure early (fail fast). Risk-based testing is beneficial for time and resource constraints. Risk identification can be conducted by getting all stakeholders to assess: Where the likelihood of failure and business risk are high, the derived priority is marked as "3" representing the highest category (Fig 1). Concentrated efforts and thorough testing of category 3 can help identify critical issues of priority planning big risks early. Derived priority items in "2" and "1" can be taken up subsequently in that order. Once the risk categories are defined, risk options can be determined. Stakeholder involvement in risk options is an essential step in gaining customer confidence. Risk options can range from contingency planning to mitigate the risk, take an informed decision to postpone, or ignore the risk at the current time. Resource allocation based on business impact and options can increase testing efficiency. The level of testing for each of the priorities can be agreed upon based on these suggestions: Testing the high risk of failure for business early can help the project move into a live environment with low-risk issues, creating a system that can still be used. Identifying and resolving issues early also leads to a higher confidence in the solution and happier customers. Without a riskassessment plan, the average project goes live with unknown issues and has a higher risk of failure post release. Risk-based Testing Improves Testing Efficiency and Quality Advanced planning and better mitigation strategies help address risks early where they are easier to resolve, less impactful to the customer, and improve delivery targets. But selecting the right strategy for testing is a challenge. The goal is to use a strategy that improves the quality of testing, identifies the critical functions to test, and improves customer confidence. Risk-based testing is a collaborative effort for testing

teams and business stakeholders to identify and prioritize high-risk items and provide a framework for setting priorities. Involving the business in risk assessment also brings increased confidence in the solution being delivered. This combination of collaboration, planning, and proactive testing ultimately leads to improvements in quality and success. Saurabh Aggarwal PDEng Managing Consultant, Data Analytics & AI Consulting Saurabh is a data scientist involved in driving business value by using AI/ML techniques in diverse industry use cases. He is passionate about solving real business problems using cutting edge technologies. Saurabh holds PDEng (Professional Doctorate in Engineering) from TU/e, Netherlands and Master of Technology from IIT Kanpur, India. Priya Kanniah Managing Consultant, Data Analytics & AI Consulting Priva is a techno functional consultant with over 15 years of analytics experience across industries such as banking, asset management, insurance consumer electronics etc. Priya holds a MBA in finance from the Indian Institute of Management, Bangalore (IIMB). www.wipro.com/blogs/anand-deshpande/ ---- Contact Wipro Blogs By Author Improving Manufacturing Profitability with Effective Margin Management Real-time Asset Monitoring and Remote Maintenance with Digital Twin blockchain to reduce counterfeits in product returns Image analytics, RPA and SAP Intelligent Technologies: Improving manufacturing outcomes by 20% Please fill the required details to access the content Anand Deshpande Anand Deshpande Principal consultant, SAP Digital Innovation Group at Wipro Limited. Anand Deshpande is Principal consultant, SAP Digital Innovation Group at Wipro Limited. He has over 18 years of experience working with various SAP products like SAP S/4HANA, ERP, cloud platforms and digital technologies. Anand has successfully delivered several implementations and digital transformations for customers. He currently leads SAP Digital solutions for the Manufacturing, Retail and Life Sciences industries. He can be reached at anand.deshpande2@wipro.com Over the past two decades, automation has become ubiquitous in manufacturing. Robotics, Artificial Intelligence, Machine Learning, Internet of Things and many other digital technologies make manufacturing the intelligent and smart industry it is today. The ongoing COVID-19 pandemic is having a farreaching impact on manufacturing. The trend of counterfeit products being returned by consumers is having a major impact on big brands. Despite the advances being made by technologies driving Industry 4.0, purchase managers, plant managers and quality inspectors are struggling to meet 

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### Technologies: Improving manufacturing

#### outcomes by 20%

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across the Industry's manufacturing scenarios. For e.g. an automobile manufacturer could use Quality Insights to examine components coming into its assembly line from various suppliers. The real-time application would not only reduce human dependency, but also reduce training costs, provide cognitive inputs to help override automated system decisions, drive increased productivity with better accuracy in rejection and faster commercial resolution with suppliers. Overall, manufacturers using Quality Insights can expect to boost sales due to accurate and highly reliable quality processes with reduction in faulty manufacturing. This is aside from the fact that the real-time process also provides accurate action to mitigate commercial impact from suppliers. Industry: Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

# Blockchain to reduce counterfeits in product returns

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examines it before accepting the return. The product is then sent back to the distributor or retailer before the customer can be refunded the cost of the product. This is not the happiest situation to be in for the customer as it means money is blocked (worse, the credit card company may be charging interest on the amount) and a replacement product, especially if it is a big ticket fashion item, cannot be bought until the refund is complete. Add to this the fact that the company executive who began the return process has no way of examining the returned product for counterfeits. What if the product had a unique identification number on it to help track authenticity? Wipro has created a process that uses blockchain to generate a unique encrypted identification number (WPIN) for any product. This number gets into the manufacture, assembly and distribution of the product, preventing counterfeits from entering the supply chain. During the product returns by consumer, WPIN is scanned which helps to verify the authenticity of the product. If the product is authentic, it sets off blockchain-based processes of SAP Intelligent Technologies services and backend SAP S/4HANA Fashion system that trigger a mail to the customer recording the details of the product being returned along with an apology and an instant refund. The product then goes for examination and reprocessing. When the reprocessed product goes back on sale, with its WPIN carrying the complete history of the product, from manufacture to return and reprocessing. Customers can examine the entire history of the product before buying it. The advantages of a blockchain-based solution would help simplify reduction of fraud in returns/ reverse logistics as well as ensure that end-customers are not impacted by slow and inefficient returns processes. Instead, customers have access to the complete product history while the manufacturer has insights related to required improvements in the supply chain. Reference i https:// www.thefashionlaw.com/home/counterfeit-jeans-and-the-rise-of-the-24billion-return-frauds-economy Industry: Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. ===============

#### Real-time Asset Monitoring and Remote Maintenance with Digital Twin

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Modern Definition of Developer Productivity Please fill the required details to access the content Real-time Asset Monitoring and Remote Maintenance with Digital Twin May | 2020 The ongoing COVID-19 pandemic is having a far-reaching impact on manufacturing. Manufacturing supply chains, vendors, and financiers are feeling the heat, and on-floor operations are being disrupted as well. Modern day manufacturing facilities are typically always-on and hyper-connected, given the adoption of Industry 4.0 led Smart Manufacturing levers. Effective Asset Management is therefore a critical imperative as asset downtime or failure under any circumstances is non-negotiable. This requires real time and continuous inspection of equipment in production lines - an aspect now rendered nearly impossible given the COVID-19 induced social distancing restrictions. How can industrial manufacturers realign their operational model during and post the pandemic situation to ensure minimal impact and drive resiliency in all aspects of their business? The post-pandemic manufacturing world will be intelligently automated The answer lies in fully embracing Digital Transformation (DX) and focusing on building remote capabilities in operations, product innovation, supply chain, customer management and in the overall business in general. A recent IDC survey of CXOs in China revealed that organizations are recognizing the business value of IT and DX in enabling long-distance collaboration, and digital formats of business development and operations amid the COVID-19 outbreak1. Industrial manufacturers now need zero-touch remote asset management capabilities to ensure efficient end-to-end asset management, early detection and remediation of issues, and root cause analysis. Wipro's Intelligent Asset Management solution is designed to enable just that. Wipro's Intelligent Asset Management solution leverages a real-time digital twin of the asset components to be inspected, thereby empowering the product engineer/ owner and line managers to view anomaly alerts in components, 360 view of critical equipment, analyze dependencies on parameters, and simulate and predict failures in the live environment. The application is integrated with backend SAP S/4HANA system and Virtual Reality (VR) capabilities of SAP Intelligent Technologies services to provide an immersive experience, with real-time data, to assess a situation and fix issues immediately. Its highlights include: The resulting near-zero downtime for machines helps manufacturers reduce revenue losses by up to 30%, and overhead costs by up to 20% by enabling a seamless virtual connect between the product engineer/owner and line manager. It also boosts asset lifetime value by 20%, and uptime and productivity by 10%, thanks to real-time monitoring. Connected assets will lead the manufacturing of tomorrow While enabling visibility into manufacturing or field operations is essential, how we ensure it will change significantly in the post pandemic world. While devastating in its impact, the virus is also showing us how important real-time information is in running business operations and becoming a truly digital Enterprise. IoT-enabled connected assets will be the new norm in the future, as realtime asset data will be increasingly used to derive actionable insights for connected equipment, increase productivity, compress costs, and enable intelligent supply chain solutions. End-to-end tracking and tracing of assets will become more relevant in the post COVID-19 era to enable Intelligent Asset Management with improved production efficiencies and product quality. References 1 IDC, CXO Surveys: IT and Digital Transformation Show Growing Value as the COVID-19 Epidemic Takes Its Toll, https://

www.idc.com/getdoc.jsp?containerId=prCHE46116820 Industry: Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

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# Improving Manufacturing Profitability with Effective Margin Management

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platform, the solution: Improve margins by knowing what really drives them By sharpening manufacturing intelligence through holistic, contextual and actionable insights, Wipro's Manufacturing IQ (MIQ) - Margin Manager Solution enables effective profitability management. Real-time analysis of financial cost, productivity, and quality at a granular level drives actionable decision-making to help manufacturers tide over periods of uncertainties and volatilities in demand, supply and operations. Adopting a standardized process to identify, improve and review margins periodically helps manufacturing leaders confidently rely on informed consideration rather than instinct. Industry: Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of https://www.wipro.com/blogs/rambabu-kata/ ---- Contact Wipro Blogs By Author Unified digital delivery model for telco service providers Next-gen apps with next-gen Platform as a Service Please fill the required details to access the content Rambabu Kata Rambabu Kata Senior Consultant, Wipro Ram is an IT professional with 25 years of industry experience in IT, delivery, architecture, practice and pre-sales. He has a Bachelor's degree in Electronics and Communication Engineering, and Masters in Marketing Management. He can be reached at Rambabu.Kata@wipro.com. Digitalization and Cloudification are vital to business success and not an option any more. The Telco industry is one of the first to adopt newer technologies. In the era of digitalization, businesses can make a big difference by enabling agility and accuracy to produce secure and robust 

#### Next-gen apps with next-gen Platform as a Service

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with Wipro's IPs, helps build, manage and sustain container ecosystem through end-to-end automation of container-based IT lifecycle. nPaaS - The right PaaS nPaaS, a platform for the container ecosystem, delivers end-toend operations - both, build and manage. Build is achieved with SUSE CAP's functionalities while management is realized with AppAnywhere, Wipro's managed service comprising of tightly integrated technologies that deliver end-to-end automation of container-based IT lifecycle. nPaaS enables the use of any container platform, either natively available, bring your own platform, or a mix of both to deploy at any location - on premise or public cloud. Some of the salient features of nPaaS are: Key roles and responsibilities in the container environment are different from the traditional IT estate (See Figure 1). nPaaS empowers different users based on roles to perform the tasks on their own in an automated way to meet the business demands in an agile mode. The entire lifecycle of operations including building, managing and securing of container platform becomes simpler and more efficient. Related read: The case for platforms and containers with SDx To conclude Wipro's established global strategic partnership with SUSE delivers proven solutions. SUSE CAP integration with AppAnywhere enables build, manage and sustain of container ecosystem (See Figure 4). Wipro and Intel are collaboratively working to define reusable, select solutions in emerging areas and nPaaS is one of those select solutions. To know more about nPaaS, reach us at sdx-cis@wipro.com AppAnywhere automates the entire IT lifecycle for cloud-native applications while delivering freedom from lock-in and innate agility of Kubernetes based systems. To know more about its unique set of capabilities, please contact us at sdx-cis@wipro.com Industry: Rambabu Kata Senior Consultant, Wipro Ram is an IT professional with 25 years of industry experience in IT, delivery, architecture, practice and presales. He has a Bachelor's degree in Electronics and Communication Engineering, and Masters in Marketing Management. He can be reached at Rambabu.Kata@wipro.com. In the evolving landscape of digital workplaces, efficient field service operations are critical in ensuring reduced downtime... appy employees usually stay at their jobs, frustrated workers often don't. Chief human resource officers (CHROs) tell us that the corporate leave of absence (LOA) process is one of the most common sources of employee frustration. Employees often rank their LOA experiences low on the satisfaction scale, using descriptors such as complicated, confusing, inconsistent, time consuming, and unresolved. In a world where business is evolving at the speed of thought, rapidly changing market conditions pose several challenges for enterprises across industries. \_\_\_\_\_

### Unified digital delivery model for telco service providers

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required details to access the content Unified digital delivery model for telco service providers February | 2020 Digitalization and Cloudification are vital to business success and not an option any more. The Telco industry is one of the first to adopt newer technologies. The exponential rate of change in technologies makes adoption and maintenance of the IT estate a critical and challenging task. With Next Generation (NexGen) technologies, the IT estate turns multi-cloud/ hybrid cloud in nature and the delivery structure becomes more complex (See Figure 1). This leads to the need to integrate many systems, processes and functions to make the entire ecosystem function smooth. Hence, having an integrated, automated and optimized delivery model and platform that can support core Telco systems/ equipment, network functions and business IT applications in a seamless manner becomes crucial. Figure 1: Logical view of the Telco IT estate Key requirements from a unified, integrated delivery model are: The challenge: The silo effect With the introduction of Cloudification, the delivery models in an organization become more discrete and silo (See Figure 2), and have major constraints like: Figure 2: Discrete, silo delivery model Delivery model options Some of the best possible delivery models in the cloud era to meet business demands are multi-fold wherein each model has its own pros and cons (See Figure 3). Figure 3: Widely used delivery models An optimized, integrated delivery model should enable support to achieve not only cost benefits, but also ensure compliance along with meeting changing business demands. An SI-led model supported by respective OEMs (See Figure 4) would enable a seamless, integrated, and accountable delivery model that will deliver key benefits with: Figure 4: End state delivery model The execution approach Since there is a mix of heterogeneous set of technologies, and multiple service providers / SIs and OEMs in the target model, it is essential to define a systematic approach, either in a waved or phased manner aligned with business, to reach the end state transformed model. This will help protect the investment while defining the cloudification and transformation journey. In the transition state, key tasks are to standardize the support portfolio and integrate with the ecosystem (See Figure 5). Figure 5: Transit state of delivery model Some of the benefits of this approach are: End state model: Figure 6: Target delivery model: Unified and integrated How it delivers better results The unified and integrated delivery model adopts the reliability engineering methods (See Figure 7). Figure 7: Reliability Engineering Mode for resources Conclusion: Based on the organization's technology roadmap, cloudification journey and transformation approach, one has to define the transit approach by selecting the low hanging fruits first. The unified, integrated delivery model supports digital transformation while delivering hybrid cloud benefits such as scale of economies, flexibility for workload portability while ensuring security and compliancy. With the power of Software Defined Everything (SDx) and APIs, Wipro has built integrated and unified delivery model platforms and IPs that deliver automation and integration for digital transformation. These enable businesses to offload their delivery responsibility completely and focus on their core business growth. To know more about Wipro's unified delivery Senior Consultant, Wipro Ram is an IT professional with 25 years of industry experience in IT, delivery, architecture, practice and Pre-Sales. He has a Bachelor's degree in Electronics and Communication Engineering, and Masters in Marketing Management. He can be reached

at Rambabu.Kata@wipro.com With the advent of digital native customers, banks are facing a paradigm shift in their customer behavior. Performance and scalability of IT systems have always been the key non-functional requirements that are used to gauge the production-readiness of any implementation project. Do you know what end-point protection tools are running on your desktop or laptop? If not, you can hover your mouse over at the quick access task bar and see icon descriptions.

### Build a Unique Business Edge by Making

### Customer Experience Your Superpower

---- Arcticle source ---- https://www.wipro.com/blogs/satish-chandrabhaskara/build-a-unique-business-edge-by-making-customer-experienceyour-superpower/ ---- About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Build a Unique Business Edge by Making Customer Experience Your Superpower February | 2020 A smile goes a long way. Studies have shown that a smile can improve customer confidence by up to 10% i. When you laugh with a customer, it improves mood even more and the customer is likely to go back with a great impression. Businesses and sales people have always recognized the importance of delivering great customer experience (CX). Unfortunately, in a virtual world, where social distances are increasing, it is not always possible to serve customers with a smile. This is why investing in technology—that can deliver much more than a smile—to enhance CX is becoming extremely important. There is hard evidence to support this: A Salesforce survey found that 67% of customers were willing to pay more for a great experience. The same survey also found that a poor experience can have a cascading effect— 62% of those who encounter a bad experience said they share it with others ii. In fact, Customer Experience Management (CXM) will be at the very top

of the business agenda for organizations in 2020 along with better pricing and quality of products and services. Getting closer to customers and employees The push for improved CX needs to be viewed in the light of changing expectations. Once, it was adequate to have customers search for products on portals, place them in their shopping carts and pay for it. More is expected from e-commerce portals now. They are expected to automatically make recommendations and surface better options for customers based on their online behavior, needs, intent, purchase patterns, trends observed in peers and payment preferences. This means analyzing data in near real-time to go beyond delivering simple search results. Similarly, organizations are attempting to improve the employee journey from the pre-interview stage to onboarding, training and exit. To do this, they conduct regular employee surveys that capture information at every stage. The goal is to get closer to the employee and improve engagement, retention and productivity. A classic example of this is when an organization asks a new applicant why he/she is applying to the company (possibly at the time the applicant is uploading the resume). The response can place extremely valuable information in the hands of the recruiting team. Organizations are attempting to provide information to their sales and marketing teams that can improve brand experience, thereby improving brand value; human capital management teams are capturing employee information so that the workforce can relate more closely with organizational values. Product and service management teams are equally concerned about delivering CX that aids in achieving business targets and goals. To do this, they need answers to questions such as "Am I reaching out to customer with the right product and service?" and "Which of my customers can provide feedback that will help me create better products and services?" Leading businesses like Nike and BMW are keen to know how their premium customers are using their products, what they want next and how they can boost brand experience by meeting their expectations. Using technology to boost CX CX is become vital and is playing a significant role, especially in Retail, Media, Manufacturing and the Pharma industries. This has been amplified in the light of the digital transformation wave that is currently under way. Embracing digital implies changing processes around CX and deploying technology to achieve CX goals. One analyst report forecasts that by 2022, two-thirds of all CX projects will make use of IT, up from 50 percent in 2017 iii. Many of these ideas and concepts, business imperatives and must-haves, around CX are well understood. The challenge for organizations is to ensure that systems that capture data related to CX are integrated with their ERP. This will ensure a rapid response based on what data suggests. Among the more advanced CXM platforms that does this is Qualtrics (recently acquired by SAP). It focuses on customer, employee, product and brand experience data, combines it with insights from ERP, websites/ portals and operational data to generate experiences with great precisions. For organizations hoping to build a customer-focused work culture, Qualtrics-type CXM tools and technologies are becoming critical. It is equally important to have a technology partner that understands the role of CX and additionally has the experience of implementing and supporting a variety of CRM and ERP systems. This makes it easier to go beyond vertical CRM systems and leveraging ERP to help understand markets, customers and employees—and then accurately calibrating CX journeys backed by template-based content and collateral

that aid in the improvement of CX. The goal of all CXM is to make the journey for customers and employees intuitive, satisfying, happy and memorable. Great CXM can support premium pricing, lead to higher revenues, improved loyalty, referenceability, creating brand ambassadors, lowering the cost of customer acquisition, extracting higher customer lifetime value (CLV), boosting customer satisfaction (CSAT), building an unassailable business differentiator and even impacting stock prices. There are entirely new technologies that are reshaping customer experience. These include Artificial Intelligence (AI), Virtual Reality (VR), Augmented Reality (AR), Mixed Reality (MR), Voicebot interaction, and increased access to customer data. CX, without doubt, presents an exciting, sophisticated and rapidly evolving business opportunity. The trick is to understand your customers, capture their feedback/ sentiments, make an emotional connect and act upon the feedback and their sentiments to deliver great CX across channels. Reference: i https://www.sciencedirect.com/science/article/abs/pii/ S0167487001000599 ii https://www.salesforce.com/research/customerexpectations/ iii https://www.gartner.com/en/newsroom/press-releases/ 2018-02-19-gartner-says-25-percent-of-customer-service-operations-will-usevirtual-customer-assistants-by-2020 Industry: Satish Chandra Bhaskara Practice Head, SAP Solutions, Wipro Satish Bhaskara leads the SAP C/ 4HANA Competency at Wipro Limited. He has 20 years of experience in various SAP Modules. Customer Experience Management on Qualtrics and C/4HANA Integration are his focus areas. He is an expert in the areas of SAP CRM / SAP C/4HANA and has implemented multiple transformation programs. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to reexamine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/mohit-bansal/ ----- Contact Wipro Blogs By Author Please fill the required details to access the content Mohit Bansal Practice Director and Head DFT & TPE practice, Industrial & Engineering Services. Wipro Limited. Mohit has more than 25 years of experience with Significant time in DFT/Test/ Characterization and Low power IPs/SOC /Clock strategist and has worked in senior roles at Qualcomm, AMD, Ikanos, PLX (AVAGO), Teranetics, & Genesis Microchip prior to joining Wipro. He is a Postgraduate engineer with a Master's in Electrical Engineering and PG diploma in Interconnection technology from IISC Bangalore. He leads the DFT and TPE practice at Wipro. He has also received awards for his research paper on 

#### The benefits and challenges of 7nm technology

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Teranetics, & Genesis Microchip prior to joining Wipro. He is a Postgraduate engineer with a Master's in Electrical Engineering and PG diploma in Interconnection technology from IISC Bangalore. He leads the DFT and TPE practice at Wipro. He has also received awards for his research paper on Test automation at NTU Singapore. To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. CSPs are looking to the enterprise (business-to-business) segment to help monetize their investments in 5G. As management guru Peter Drucker once said, "What gets measured, gets managed."

---- Arcticle source ---- https://www.wipro.com/blogs/venkatraman-srinivasan/ ---- Contact Wipro Blogs By Author Rethinking universities by putting student experience front and center Please fill the required details to access the content Venkatraman Srinivasan Venkatraman Srinivasan Director of Higher Education, Wipro Venkat has over 25 years' experience with strategy, technology and operations of the education industry. His areas of interest and expertise include higher education management, student retention and digital technology solutions for connected student experience. Venkat has been a speaker at industry events, published several thought leadership articles and has a point of view on most pressing issues faced by the education industry. The outbreak of COVID-19 and the way it is disrupting lifestyles and businesses is unprecedented. This change is going to be tough for universities that have traditionally found it harder to change.

Rethinking the University

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isn't determined by the parameters listed above. There are other aspects of a student's journey that we never considered addressing in the past, including touch-points that are relevant to the student experience. Successful universities of the future will be those that embrace technology to shape the experiences of a student's life, by adopting a totally different approach, to enhance student outcomes. This blog focuses on three key areas where student experiences of the future will be defined. Student Finances: Investing in Futures A student loan statement isn't the easiest document to read. All you know is that you've borrowed a lot of money but there is no one place to get a complete financial picture. A university that is really serious about helping a student manage their finances could provide a service or solution through which the student can track loans, manage payment, obtain further loans (federal or private, micro lending, peer-topeer loan). These solutions that exist in the banking industry haven't been explored to the fullest by universities. They tend to offer the student an enhanced experience of managing and tracking debt. Meanwhile, with income-sharing agreements, colleges are piloting agreements that offer a 100% fee waiver for a course. Once the student gets a job, the university takes a share of the salary every month that pays back the cost of tuition, at a nominal rate of interest. Universities need systems to manage this: estimate the student's financial capability, track loans and repayments. In fact, this department of the university needs to look like the loan department of a bank - with the people, processes, and technology that make it run. This is where a university needs to think like a bank. Career Services: Start thinking like a Placement College While most universities have well-oiled career services, both at college level and department level, there is a need to rethink the way the student experience is shaping up on this front. If the purpose is to be an interface with top companies to help students find jobs suited to their skills, the career-fair and resume drop-off formula doesn't always lead to the best results. More importantly, the question to be answered is how universities are adapting to the future of work, in a world where skills and job requirements need to be matched better than ever. Schools are currently limited by the kind and number of companies that they have a relationship with. Many are not matching student capability to the right type of careers and companies. The solution lies in universities taking a leaf out of Executive Education and professional career service companies. Imagine if students could have a profile that has rich information linked to career tracks in the real world. AI and machine learning could empower recruiters with more information even as students are better equipped with information on job vacancies and career openings in various industries. The richness of this profile can be used to attract new employers. That's how universities need to think to enable information interchange between recruiters and student prospects- a game-changer for future career services at universities. Lifelong Learning: Professional Development for a Great Career There exists a massive mismatch in employer needs and employee skills, and there are many companies working with corporations to bridge this gap. These skill service providers partner with universities and leverage their own network of partners and platforms to help companies bridge their talent gaps in both hiring and training. This need for executive education continues through the career of the employee, with needs varying with the life-stage. It is time for universities to step up their game in this area. What if universities and employers could partner with each other in this last-mile

training program to ensure a student transitions into the workforce more efficiently and hits the ground running? This would borrow from the world of the Learning and Development department and impart vocational or career skills for the job that isn't part of the curriculum. This could involve gamified learning tools, interactive modules that test the student on skills and knowledge before moving on to another level. In fact, this department of a university would begin to look like the Training Department of a company, and would significantly change the student's experience for the better. Skin in the Game: Helping universities invest more in the student experience Successful universities of the future will be set apart from the rest by how invested they are in the student experience. How well a university embraces digital technologies is a key enabler. New-age digital technology will redefine the student experience by helping universities be more invested in the student. Every time there is an income-sharing agreement, a university is investing in a student, putting its belief in the student, and throwing its weight behind their future prospects. This shift in attitude is what will help students have a better experience while at university. To help this happen, universities need to think like the industries that they will borrow from, with technology and solutions in lockstep with this change in approach Industry: Venkatraman Srinivasan Director of Higher Education, Wipro Venkat has over 25 years' experience with strategy, technology and operations of the education industry. His areas of interest and expertise include higher education management, student retention and digital technology solutions for connected student experience. Venkat has been a speaker at industry events, published several thought leadership articles and has a point of view on most pressing issues faced by the education industry. Today's new age customers have ushered in the need for redefined technology enhancements, that are all about conversational interfaces and AI (artificial intelligence) assisted services. On the operational level, traditional metrics continue to be driven by productivity, and finally, at the emotional needs level, there is a requirement to address the emotional quotient of both the customer and the agent. As of July 30, 125 organizations claimed to have been affected by the Blackbaud security breach that occurred in May of this year. Of those groups, nearly half are schools or universities, highlighting a trend of increasingly complex ransomware attacks on learning institutions. To keep up and stay secure, schools need to modernize more strategically. How online education tools need to be reinvented so universities can adapt www.wipro.com/blogs/carol-tyler-fitzgerald/ ----- Contact Wipro Blogs By Author Design Thinking and Organizational Change Management: A Partnership Please fill the required details to access the content Carol Fitzgerald Tyler Carol Fitzgerald Tyler Global Lead, Organizational Change Management Carol Fitzgerald Tyler is a globally recognized and published author on organizational transformation, change management (OCM), and communications strategy. She has a passion not only for OCM but for delivering an outstanding customer experience while aligning people with technology changes. She is also a Board of Trustee member for the Astronaut Scholarship Foundation, providing STEM-based scholarships, mentoring, and career growth to university students. When multiple perspectives shape how an organization handles change, greater opportunities for success are in reach. Get the details at our blog. 

www.wipro.com/blogs/carol-tyler-fitzgerald/design-thinking-andorganizational-change-management-a-partnership/ ----- About the Author Contact Wipro Related Blogs 5G: Taking the Aviation Industry to New Heights New Frontiers Accelerate Time to Market The Power of CI/CD for Telecommunication Service Providers Please fill the required details to access the content Design Thinking and Organizational Change Management: A Partnership March | 2020 As COVID-19 continues to spread throughout the world, our economies are facing challenges we never thought possible. Social distancing and mandatory shut-downs are putting unprecedented strains on businesses, forcing organizations and individuals to find new ways to navigate the uncertainty. Traditional approaches aren't working. We need novel solutions, and design thinking can help us find them. If you're surprised by this suggestion, it may be because you're unsure of what it really means. Despite the name, design thinking is not exclusively for designers. It's not even restricted to design. Rather, it's an approach that encourages organizations (from small teams to large corporations) to explore solutions based on the needs of their end users, leading to innovative thinking that never loses sight of the lives it's meant to improve. The truth about design thinking Design thinking is the conception of innovative ideas, products, experiences, and services to improve the lives of the end users, whether they're customers, company stakeholders, or employees. The process encourages idea generation by bringing together people from different teams, from across an organization, to collaborate. A diverse group has greater perspective and experience, and is more likely to propose solutions that benefit everyone and have a greater awareness of where change is needed and how new accomplishments can be made. Unlike traditional problem solving, which employs convergent thinking (choosing the best solution from available choices), design thinking employs divergent thinking (innovating choices in an integrated and holistic manner). Divergent thinking encourages the creation of new choices, and the application of those choices to business challenges. This is particularly important now, a moment that appears to be immune to traditional economic stimulus. From manufacturing to distribution to retail, all aspects of supply chains are being negatively impacted by COVID-19. Businesses need new ways to stay active while ensuring the safety of their employees, clients, and customers. With design thinking, as with other business processes, there is a method to reach a goal. The approach identifies challenges, brainstorms possible solutions, and then experiments until the "right" solution for an organization is discovered. But design thinking differs from other business processes in that it is people-centric. At its core, design thinking is a human approach to both digital transformation and business needs. "What does the human need?" This is the central question. As a human approach, design thinking engages everyone in an organization. It is not reserved for an elite group, but rather for an entire organization's workforce. When you get a group of people working together, trying to solve the same problem, they will naturally come up with different angles and approaches. That "magic" of diversity sparks innovation. Design thinking sessions are intended to be places where creativity and innovation can be expressed and flow freely, and where exploration can take place without fear of failure. This might not be a comfortable way of working for those who have never done it. Most people are afraid to think outside the box, much less share that thinking. But design thinking promotes ideation through collaborative sessions in which people

add to ideas rather than tear them down, encouraging trust and cooperation throughout the organization. This is where organizational change management comes in. Organizational change management (OCM) Increasing collaboration and innovation, while lessening the fear of adoption from all sectors of an organization, is the fundamental intention of OCM. Creating and transforming business models and cultures isn't a one-time event; it must become part of a company's culture, part of their ongoing effort to be more adaptive by becoming more human-centric. Why "humancentric"? Because employees are humans, and so are customers. Identifying the human element in any decision will help align it with the drives of the people it's meant to serve. If a business is looking to inspire new customers, their decisions need to be human-centric as it relates to their customers: What are their motivations? needs? concerns? How does the proposed solution address these points? If the organization is looking to inspire collaboration among employees and teams, they need to be human-centric in relation to their employees, addressing their motivations, needs, and concerns. People at all levels need to know their input is valuable for helping drive innovation throughout the organization. This encourages participants to engage business challenges and feel responsible for addressing them. It also shows that changes are not only needed, but welcomed. One of the most vital components of organizational change management is storytelling. That might sound far-fetched, but storytelling encourages empathy within organizations for end users by bringing to life the users' journeys. Empathizing with the users' journeys helps teams think, not of themselves but of their customers and their employees. Consider the user journey for a typical retail customer. How has that story changed under the current circumstances? What are their pain points as a result? For one, physical stores may be closed, so traffic may be digital, through websites, which might be less personal or hard to navigate. There are also financial concerns: Are people spending money differently now? Have their preferences changed? Trying to relive the experiences of the end user highlights a range of challenges and helps organizations strategize comprehensive solutions, rather than shooting in the dark. However, telling stories isn't enough. OCM must inspire trust and involvement in the design thinking process, to support action through it. As a committed partner to design thinking, storytelling, and visualization, OCM "shows" the organizational change by relating it to user personas and departments. It creates an environment of trust and creativity to afford the space for change by showing how it affects real change for real people in the end. Organizational change management works to help all stakeholders discover. create, and communicate a shared vision. This vision can be the inspiration to align business units and other areas that have in the past experienced friction due to siloed processes. That vision can then be enhanced and explored by stakeholders, employees, and even customers. And that's where the partnership between organizational change management and design thinking comes in. The partnership: Design thinking and organizational change management How can an organization begin to embrace design thinking through the lens of change management? Design thinking and OCM both have a common, strategic starting point: Begin with the future vision in mind. This philosophy focuses not on the technology, but on how that technology enables user adoption and a vision of the future. Going back to the retail example, a business might consider incorporating virtual reality

into their e-commerce—not because the technology is emerging, but because it allows the company to engage with their customers remotely and generate interest around a new experience. To kick off this process, an organization should coordinate a virtual OCM-centric design thinking workshop. This is a time for people from across the organization to come together with others not like themselves to problem-solve, ideate, and ultimately create solutions reflecting the new way of being for the organization. The key to success is to ensure collaboration and brainstorming are properly facilitated and structured to ensure innovative ideas grow and expand. This can lead to a better understanding of the human side of change, improved adoption of changes, the breakdown of silos and other organizational barriers, and ultimately the development of a strategic plan. Design thinking combined with change management might also include cutting-edge customer engagement and training, to better assist teams in understanding the next best step and how to apply this step to engage key resources and requirements throughout a project. Training multiplies the strategic value of design thinking by encouraging participants to utilize their new skills in real-world examples. Now more than ever, businesses must be resilient. They need to be unified and strategic, and they need to act fast. OCM helps stakeholders visualize how to navigate uncertainty. Design thinking accelerates digital and organizational transformation. With a focus on people, movement, participation, and culture shifts, OCM lays the groundwork for successful design thinking, and helps businesses discover ways to drive customer value, employee satisfaction, and market opportunity. For more information on how to navigate change in your organization, contact us. Industry: Carol Fitzgerald Tyler Global Lead, Organizational Change Management Carol Fitzgerald Tyler is a globally recognized and published author on organizational transformation, change management (OCM), and communications strategy. She has a passion not only for OCM but for delivering an outstanding customer experience while aligning people with technology changes. She is also a Board of Trustee member for the Astronaut Scholarship Foundation, providing STEM-based scholarships, mentoring, and career growth to university students. 5G is an ecosystem play where multiple technologies Gender equality leaders share insights on inclusion. New technologies like 5G, plus constantly changing consumer https://www.wipro.com/blogs/vinayak-kulkarni/ ---- Contact Wipro Blogs By Author Smart Manufacturing: Powering the Next Phase in Industrialization Please fill the required details to access the content Vinavak Kulkarni Vinayak Kulkarni Senior Practice Manager in Wipro's Industrial and Engineering Services division Vinayak has worked extensively in the Industry 4.0, Smart Manufacturing and Plant Automation Systems for the last 20+ years. Currently, as a Senior Practice Manager in Wipro's Industrial and Engineering Services division, he is responsible for the Manufacturing Operations Management Practice. He is also working with multiple technology teams for building next generation Industry 4.0 solutions for different customers. For more information, contact him at vinayak. 83@wipro.com As many as 89 percent of the Fortune 500 companies in 1955 are not in the Fortune 500 list of 2019! These enterprises have either gone bankrupt, merged with a larger entity, or have been outranked by more competitive enterprises. ===============

## Smart Manufacturing: Powering the Next Phase in Industrialization

----- Arcticle source ----- https://www.wipro.com/blogs/vinayak-kulkarni/smartmanufacturing-powering-the-next-phase-in-industrialization/ ---- About the Author(s) Contact Wipro Related Blogs Connectivity and Interoperability: Realizing the Full Potential of Comprehensive IoT Solutions Strategic Partnerships Will Drive 5G Success for Communications Service Providers Using IoT to Create an Intelligent Enterprise Please fill the required details to access the content Smart Manufacturing: Powering the Next Phase in Industrialization March | 2020 As many as 89 percent of the Fortune 500 companies in 1955 are not in the Fortune 500 list of 2019! These enterprises have either gone bankrupt, merged with a larger entity, or have been outranked by more competitive enterprises. 1 A staggering number of companies have failed to maintain their market share in the last 60 years. The inability to cope with evolving technology trends and customer needs is the key reason for their decline. Over the years, every sector has been swept by the winds of change. The manufacturing sector is no exception. Its transformation, starting from steam engines and electrification to information technology and automation has seen the rise and fall of many enterprises. Today, once again, the winds of change are bringing the new framework of Industry 4.0 to the threshold of manufacturers. This new framework focuses on building a network of cyber-physical things to make factories smart, agile and competitive. Currently, a few futuristic manufacturers have welcomed Industry 4.0 and are working to benefit from new technologies like augmented reality, Internet of Things, artificial intelligence, cloud, and robotics. However, many industries are yet to accept that they are on the threshold of change. For them, the need for Industry 4.0 is not clear. By 2025, Industry 4.0 could create an approximate value of US\$ 3.7 trillion to manufacturers and suppliers according to a recent McKinsey report.2 This value is derived through new capabilities in predictive maintenance, interconnected supply chains, autonomous machines, and processes and intelligent robots. Industry 4.0 is set to enhance the agility and performance of manufacturers by bringing in a new era of networks that orchestrates continuous connections among humans, systems, and machines. It differentiates itself from the previous three revolutions by catalyzing a new level of integration and harmonization amongst the physical, digital, and biological aspects of our existence.3 Klaus Schwab, Founder and Executive Chairman of the World Economic Forum, states that the Fourth Industrial Revolution is not only about smart and connected machines and systems, but also includes breakthroughs in areas ranging from gene sequencing to nanotechnology and from renewables to quantum computing.3 Enterprises looking to embrace technologies and disrupt markets with Industry 4.0 need to base their efforts on the three pillars of integration, visibility, and analytics. Seamless integration: Industry 4.0 goes a step beyond traditional automation and requires workers, machines, and

processes to be in constant communication. It mandates the comprehensive integration of information technology (IT) and operations technology (OT), such that machines are not only automated, but their functioning also intelligently adjusts to changing conditions. Called cyber-physical machines, they can talk to each other within the factory and can even connect with warehouses and delivery trucks in the supply chain. Comprehensive visibility: By connecting every component of an enterprise, Industry 4.0 aims to provide comprehensive visibility into the functioning of an enterprise, right from the production site to the extended supply chain. Every piece of equipment is attached to sensors, communication technology, and the Internet. As a result, enterprises get near real-time information and visibility into the health and location of an equipment. Data analytics: Every connected device generates valuable data. As a result, an entire smart factory offers valuable big data that can be processed to derive insights. With artificial intelligence and machine learning, this data becomes a gold mine for predictive maintenance. It also drives automatic decision-making capabilities of cyber-physical devices and steers more strategic business decisions for the enterprise. Given that many enterprises have still not embraced the Third Industrial Revolution in its entirety, going solo to adopt Industry 4.0 might lead to chaos and failure. Partnering with a service provider who has end-to-end expertise and experience in smart manufacturing can prove valuable. As a first step, service providers must evaluate the readiness of an enterprise for Industry 4.0. They must bring order to operations, break down silos, and push prototypes into production. Recommendations, roadmaps, and policies must become integral to the scope of work. In addition to drastic improvements in performance and driving compliance, security and cost-effectiveness must be mandated as outcomes of the shift to smart manufacturing. Most importantly, the shift of an enterprise to Industry 4.0 must result in a tangible gain to its end consumers. As customer preferences are rapidly changing, and new brands are created and embraced faster than ever before, speed and agility to embrace change should become the lodestars of every Industry 4.0 transformation. References 1https://www.aei.org/carpe-diem/only-52-uscompanies-have-been-on-the-fortune-500-since-1955-thanks-to-the-creativedestruction-that-fuels-economic-prosperity/ 2 https://www.mckinsey.com/ industries/advanced-electronics/our-insights/capturing-value-at-scale-indiscrete-manufacturing-with-industry-4-0 3https://books.google.co.in/books? id=OetrDQAAQBAJ&pg=PT14&lpg=PT14&dg=The+fourth+industrial+revolution, +however,

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- +It+is+the+fusion+of+these+technologies+and+their+interaction+across+the+phys+digital+and+biological+domains+that+make+the+fourth+industrial+revolution+furWA&hl=en&sa=X&ved=2ahUKEwim6Me2wPjmAhUJfSsKHaGPAXgQ6AEwC3oECAsQA%20Its%20scope%20is%20much%20wider.

%20Occurring%20simultaneously%20are%20waves%20of%20further%20breakthrough%20It%20is%20the%20fusion%20of%20these%20technologies%20and%20their%20inthttps://www.youtube.com/watch?

 $time\_continue=277\&v=yKPrJJSv94M\&feature=emb\_title\ Industry: Vinayak\ Kulkarni\ Vinayak\ has\ worked\ extensively\ in\ the\ Industry\ 4.0,\ Smart$ 

Manufacturing and Plant Automation Systems for the last 20+ years. Currently, as a Senior Practice Manager in Wipro's Industrial and Engineering Services division, he is responsible for the Manufacturing Operations Management Practice. He is also working with multiple technology teams for building next generation Industry 4.0 solutions for different customers. For more information, contact him at vinayak. 83@wipro.com Kiran Bhogle Kiran has 21+ years of experience in Industrial Automation, Smart Manufacturing, Industry 4.0 Solutions for various Geo Customers. Currently working as a Senior Practice Manager in Wipro's Industrial and Engineering Services division, he is responsible for Industry 4.0 Practice. He has worked on various technologies to build solutions for different customers. For more information, contact him at kiran.bhogle@wipro.com To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. CSPs are looking to the enterprise (business-to-business) segment to help monetize their investments in 5G. As management guru Peter Drucker once said, "What gets measured, gets managed." www.wipro.com/blogs/karthik-markandan/ ----- Contact Wipro Blogs By Author How advanced analytics helps banks in fraud detection Please fill the required details to access the content Karthik Markandan Karthik Markandan Managing Consultant, Data Analytics and AI, Wipro Karthik has anchored various compliance and regulatory assignments for multiple global financial institutions. He specializes in leading diverse range of data, analytics, business intelligence and cloud transformation programs. A recent industry survey identified that fraud and compliance monitoring is increasingly the focus of senior management1. This is due to the rising frequency and value of fines being issued for non-compliance. Firms typically spend 4% of their total revenue on compliance, but that could rise

## How advanced analytics helps banks in fraud detection

to 10% by 20222 ================

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today's context are: Bank's Risk Management is characterized by reactive, rules-driven detection approach to provide response to regulation. However, maturing landscape and advancement in technology offers the opportunity to improve outcomes and efficiency in threat combat as well as to mitigate the key challenges addressed above. A recent industry survey identified that fraud and compliance monitoring is increasingly the focus of senior management1. This is due to the rising frequency and value of fines being issued for non-compliance. Firms typically spend 4% of their total revenue on compliance, but that could rise to 10% by 20222. Banks spend most on enhancing their transaction monitoring, fraud and payment systems3. In addition to system upgrades, banks are actively looking for applying advanced analytics to augment resilience in their compliance function. A proactive approach to fraud management As banks embark on the journey towards proactive, analytics-driven capability, they look to adopt a robust real-time approach to identify threats using data analysis and serviceoriented architecture to define the target approach. Some of the core capabilities where analytics is combined with existing legacy architecture which have proven beneficial to the banks are: Advanced Segmentation -Most banks leverage multiple technologies as part of their fraud control activities. Segmentation is a fundamental component of anti-money laundering (AML), and is concerned with the grouping of customers based on similar transactional attributes. By leveraging advanced data mining and aggregation techniques, banks are able to transition from a small number of high-level segments based on hypotheses-driven segmentation to lower-level behaviour-driven segments through data-driven segmentation. Data-driven segmentation involves the following steps: a) Identify data population b) Create an analytical base table for profile uniqueness c) Build topological model algorithms d) Validate model using test and training data sets e) Generate segments Artificial Intelligence (AI) and Robotic Process Automation (RPA) - As traditional processes and silo teams do not support an agile response to customer and market needs, banks have modelled new 'Ways of Working' to include AI and RPA. Intelligent automation in RPA has created growth through a set of features enhancing traditional automation solutions. Banks consider RPA as the starting point in their journey to unlock tangible benefits delivered by AI. Some main use cases for AI are: a) Intelligent product pricing b) Automated advanced tasks by incorporating NLP and image recognition c) Next best action through enhanced judgement d) Chat-bots and virtual agents e) Malware prediction f) Voice recognition Dynamic Transactional Monitoring - Traditional Transactional Monitoring (TM) solutions rely on static rules comparing base transaction and Know Your Customer (KYC) data against pre-defined TM configuration settings. This results in large case volumes and a high proportion of false positives through 'alerts'. These alerts are generated using a fixed batch process, usually on a monthly basis, instead of real time. Also, there is a reliance on 'judgement calls' on how alerts are handled, which is not a consistent and effective process. By leveraging analytics and advanced data science, banks are able to implement automated 'Alert Hibernation' process, which helps to detect anomalies and thereby reduce false positives. There are a number of factors influencing the growth for analytics-based TM systems. They are: a) Sustainable data ingestion approach and improved understanding of data b) Streamlined alert monitoring through the ability to discriminate recurring false positives c) Optimum usage of Level 1 and 2 alert handling workforce

d) Effective Level 3 process for filing Suspicious Activity Report (SAR) e) Standardized backlog remediation and TM system Reduction of Customer Periodic Reviews - As part of the KYC process, customer reviews are conducted manually, either periodically (based on customer rating) or triggered (based on risk). Banks find that periodic reviews do not change the customers' risk rating; on the contrary, they increase operational costs by involving manual checks. For cost savings, banks are moving to 'Risk event based reviews' wherein data from internal systems (transaction monitoring, name screening, alerts, events) as well as external data (adverse media, court rulings, government source) are integrated to compute Risk Score for each customer and reviews are conducted only for profiles that have a revised risk score based on event changes. Banks are automating client-on boarding activities, leading to decreased process time, average handling time, and end-to-end costs, helping them to reduce service backlogs. Eventbased reviews involve the following steps: a) Identify material and administrative triggers b) Build a model scoring algorithm combining internal and external datasets c) Generate risk score for customer profile based on algorithm d) Conduct reviews based on score e) Integrate score with existing workflow for case prioritization Workforce Analytics - Banks use Workforce Analytics to create the capability to understand the turnaround time and efficiency of its AML agent workforce. Analytics of agent performance is based on a combination of segmentation and predictive modelling techniques applied to agent analytical record which serves as a single view for AML agents operations. Through Workforce Analytics, banks are able to identify four dimensions that play a crucial role in the successful running of AML operations. They are: a) Alert volumes -Provides an insight to understand the alert volumes generated in Name Screening, Transaction Screening and Transaction Monitoring systems and the number of workforce required to investigate the alerts in respective areas. b) Demand management - Helps to understand the operational impact by being able to re-allocate teams and prioritization. c) Operational efficiency - Provides deep insight into agent's performance leading to higher team efficiency, thereby reducing the number of agents needed to process a certain number of alerts. d) Quality criteria - Helps to model quality performance and the factors that impact quality leading to greater operational capacity. Regulatory reporting - The impact of regulatory changes and the multi-geography nature of financial institutions have left processes fragmented with multiple hand-offs across operational teams. Regulatory breach possess significant risks / costs to firms, including monetary losses, regulatory fines, and negative reputational impacts. Evolving regulatory landscape makes regulatory reporting a constant challenge for banks, making some banks focus on analysing disparate data points and gathering insight through their integration The focus areas of Regulatory Analytics are: a) Unauthorized trading b) Market manipulation and abuse c) Laundering crime Adopting 'Regulation as a service', which provides banks with an analytical and a service model framework, brings innovative thinking to Regulation and Compliance, thereby driving excellence. As Regulation's strategic role continues to grow, bank's scale of responsibility is expanding. The resultant broader enterprise risk management can be addressed by fostering digital and analytical innovation to sustain and excel operations in meeting regulatory reporting demands. To conclude In order to deal with the rising demands of the fraud and risk

intelligent and optimized services via adoption of advanced innovative tools and technologies such as Machine Learning, RPA, Big Data, API, Blockchain and Cloud technologies. This adoption has enabled banks to drive critical business transformation outcomes by augmenting the existing framework leading to an increase in operational efficiency and increased risk management. References 1. https://assets.kpmg/content/dam/kpmg/pa/pdf/ compliance-journey-survey-2017.pdf 2. https://www.fnlondon.com/articles/ compliance-costs-to-more-than-double-by-2022-survey-finds-20170427 3. https://assets.kpmg/content/dam/kpmg/xx/pdf/2019/05/global-banking-fraudsurvey.pdf Industry: Karthik Markandan Managing Consultant, Data Analytics and AI, Wipro Karthik has anchored various compliance and regulatory assignments for multiple global financial institutions. He specializes in leading diverse range of data, analytics, business intelligence and cloud transformation programs. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. www.wipro.com/blogs/dr-stephen-f-wheeler/ ---- Contact Wipro Blogs By Author Chatbots are getting smarter! Please fill the required details to access the content Dr. Stephen F. Wheeler Dr. Stephen F. Wheeler, Ph.D. Analytics and Artificial Intelligence, Wipro Limited Dr Wheeler earned his Ph.D. in Artificial Intelligence in symbolic problem-solving systems and natural language processing. His Graduate and Undergraduate degrees are in Computer Science. Dr. Wheeler is a former university professor of Computer Science. He has previously served as a system engineer for Compag Computer corporation where he developed intelligent NLP parsing agents. Cracking the code of multiple intents in single input with Machine 

ecosystem, banks have made significant progress towards self-learning,

### Chatbots are getting smarter!

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ambition of Artificial Intelligence (AI) researchers since A.M. Turing first proposed a test for an analogue to human intelligence over a half century ago [1]. It now appears that we might be getting close to realizing Turing's vision with the advent of NLU agents incorporating machine learning (ML) within their architecture. The improvements in NLP in AI agents is attributable to improvements in language parsing algorithms and the application of ML and recent advances in artificial neural network (ANN) paradigms. This paper will examine modern language parsing techniques and applied ML to identify multiple intents within human / machine natural language discourse. Linear symbolic NLP parsing algorithms An NLP agent must be provided the syntax of the natural language from which it must infer meaning and a specific domain of inquiry presently. The NLP agent performs guite well within narrowly defined domains of discourse when the syntax of the target language has been defined well and provided to the NLP agent within a well-defined narrow domain. Around 1968-1970, Terry Winograd, while associated with the MIT Artificial Intelligence Laboratory, incorporated sophisticated language syntax analysis with a well-defined domain of discourse, a block world, within an NLP algorithm that he named SHRDLU. SHRDLU was written in Lisp for the DEC PDP6 mini-computer [2]. In 1972, Winograd published a paper titled "Understanding Natural Language" in which he defines the NLP parsing agent of his SHRDUL program [3]. His model worked amazingly well for its time and handled multiple intents reasonably well. Multiple intent identification by linear symbolic NLP parsing algorithms One of the semantic decoding issues that must be addressed by an NLP agent is that of the meaning of specific words within the context of discourse in which they are found. For instance, in the author's experimental model for his PhD dissertation, HAL (Heuristic Associative Linear-algorithm) is an artificial intelligence chess-playing engine containing an NLP parsing agent that derives word meaning from the context in which the words are found [4]. The word "Time," for example, can be either a noun or a verb depending on the context in which it appears. In the request: "HAL, time the moves, please," the NLP parsing agent recognizes "time" as a verb form. While in the request, "HAL, display the board each time a move is made," the word "time" is recognized by the NLP agent within HAL, as a noun form based on the context of the word usage. In the aforementioned examples, two separate intents are expressed, the first intent being a request for the automaton, to report the elapsed time required to produce a move response, and the second intent being a request to display the new chess-board after each move. HAL's NLP parsing agent can easily isolate these two intents when each intent is given in a single input text expression. However, the isolation and identification of multiple conjoined intents within a single text expression requires the NLP parser to perform more than a context extrapolation. One method for solving multiple intents embedded in a single expression is to separate each embedded expression at a conjunction. Typical conjunctions include: (and, but, or, nor), but may also include words and phrases such as: (also, additionally, in addition, but not) and so-forth. When the NLP parser encounters a conjunction in the input expression, the parser can separate the expression into two single subexpressions. Each subexpression can be enqueued and dequeued in order, one-subexpression-at-a-time for intent discovery and processing before the next subexpression is dequeued for NLP processing. This iterative process will be repeated until the expression-queue is empty.

For example, the following expression: "HAL, time the moves, please and display the board each time a move is made," would be separated into two subexpressions at the conjunction "and." Each resulting subexpression will be engueued to be processed one-at-a-time, thus handling multiple intents occurring in a single conjoined text expression. Machine learning as applied to NLP / NLU Within the last few years, many advanced NLP and NLU agents have come to fruition, some of which are available within the Open Source community, such as the Rasa Core NLU paradigm. Rasa Core contains a machine learning component consisting of a Recurrent Neural Network (RNN) complemented with Long Short-Term Memory (LSTM) trained on intents within a specific domain. The components of the Rasa Core consist of 1) an Interpreter that is the NLU parsing agent, 2) the Domain in which the chatbot is trained to interact, and 3) Stories that define the actions to be performed by the chatbot. The Domain consists of a file that is defined when the chatbot is implemented containing, Intents, Entities, Template, Actions, and Slots [5]. Conclusion In the last several years, much advancement has been achieved toward more human-like conversational NLU paradigms. These advancements are largely due to the incorporation of Machine Learning algorithms in the Natural Language Understanding paradigms. However, the domains of influence are still quite narrow, making these systems brittle when the dialogue leaves the domains on which the NLU agent has been trained. References [1] Turing, A. M., "The Turing Test", pub. (1950), in the Stanford Encyclopedia of Philosophy, First published Wed Apr 9, 2003; substantive revision Mon Feb 8, 2016, https://plato.stanford.edu/entries/turing-test/ [2] http:// hci.stanford.edu/~winograd/shrdlu/[3] Winograd, Terry, "Understanding Natural Language", Massachusetts Institute of Technology Cambridge, Massachusetts, 1972, in Cognitive Psychology, vol. 3, l-191 (1972). [4] Wheeler, Stephen F., "HAL (Heuristic Associative Linear-algorithm): An Artificial Intelligence Chess-Playing Automaton with Natural Language Understanding", No longer available on Chess.com. Source code, executable, and documentation available from author upon request by email at swheeler@ai-scientist.com. [5] "Your Complete Guide to Building Stateless Bots Using Rasa Stack", https://medium.com/velotio-perspectives/ your-complete-guide-to-building-stateless-bots-using-rasa-stackbc22a22e2fc7. Industry: Dr. Stephen F. Wheeler, Ph.D. Analytics and Artificial Intelligence, Wipro Limited Dr Wheeler earned his Ph.D. in Artificial Intelligence in symbolic problem-solving systems and natural language processing. His Graduate and Undergraduate degrees are in Computer Science. Dr. Wheeler is a former university professor of Computer Science. He has previously served as a system engineer for Compag Computer corporation where he developed intelligent NLP parsing agents. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the

### [E]QUALITY MATTERS

----- Arcticle source ----- https://www.wipro.com/blogs/karen-s-carter/equalitymatters/ ---- About the Authors Contact Wipro Related Blogs Data: A Strategic Asset Enabling Value Creation for Insurers Why Cyber Resilience Depends on Trust and Information Sharing Leading the Path to Recovery and Resilience Please fill the required details to access the content [E]guality Matters March | 2020 KAREN S. CARTER You said it - equal opportunity. That means people have a fair chance to prove themselves, to prove that they can deliver for the company and their colleagues and are compensated and recognized accordingly. That's the standard. Of course, bringing that to life in every corner of a global company like the Dow, with 37,000 people, is not easy. We believe in our people and that they can deliver, so we must deliver the right systems for them. TONY PROPHET We believe in the equal value of every human being. That is our north star. As part of this we recognize our responsibility to ensure that our company reflects the diverse communities we serve, so that every person at Salesforce feels a sense of belonging - that they are seen, valued, and heard. We do this by building and training our employees on our inclusive practices, in the way we lead, promote, hire, and communicate. We also share representation with our top leaders, build a community of allies, and empower our employee resource groups to drive Equality from the front lines. We are fortunate to be at a company where our leaders and founders are truly Equality champions. Before I even worked at Salesforce, I admired our co-CEO and co-founder Marc Benioff for his advocacy and courage in speaking up for marginalized communities. As he says, "the business of business is to make the world a better place." "Everyone has a role to play on the path to Equality. Men can mentor, sponsor, advocate, and champion their women leaders, peers, or employees. We can all be allies to one another and help drive Gender Equality forward." - Tony Prophet WOOL: "Pay gaps are easy to fix if companies have the commitment". In reality though, it is not as simple as writing a cheque. What must companies do to monitor and fix inequities in pay, and the long-term ramifications of the pay gap on wealth accumulation for under-represented minorities, their families and societies at large? KC Data speaks at Dow. We are a science and technology company. I talk about data because Dow - and any company needs data to tell the story of pay equity or lack thereof. And systems need to be in place, tracked regularly, to demonstrate that gaps are closing - and if not - flagged for investigation. TP We know that pay inequities are real. The World Economic Forum estimates it could take over 200 years for companies to reach pay parity. At Salesforce, we are working hard to close the pay gap and now for the last three years have audited the pay of every employee worldwide for equity based on gender. As a result, we've invested \$10+ million. But we are also looking at some of the systemic reasons that drive these gaps; last year we adopted the practice to eliminate the question

of past pay salary - an important step, as we know this perpetuates the gap. We recognize that there is more work to be done on this front and we will continue to evaluate our practices, educate, and learn on this path. WOOL: Corporate America remains notoriously, stubbornly, white - and male. Currently there are no African-American women running Fortune 500 companies. What can, and should, corporate America be doing to make sure that more and more people of color are currently in the pipeline, and have a chance to succeed on their own terms? KC When she was asked why there weren't more black women CEOs, Ursula Burns, outgoing CEO of Xerox told Fortune: "Unless you're bringing people in from Mars, it's going to be a while." Black women make up less than 2 percent of middle managers in the Fortune 500. The pipeline is sparse. Companies need to pay serious attention and be intentional in hiring, mentoring, sponsoring and developing. But change needs to begin even earlier, before black women enter the workplace. We must prepare young women by building their business acumen and teaching them the skills they need to be successful. And we need to come at it from many angles: TP When you look at the founders of these industries, particularly ours, many were not diverse. They most likely came out of an education system that had let down young women and people of color. This homogeneous starting point was compounded by network effects (founders hired who they knew) - further amplified by pattern matching, then institutionalized by unconscious bias. We know there is no acceptable excuse at this point and that the time for explanation versus action has long since passed. There is luminary talent all around us and it is our responsibility now to make sure we are building access into our industries. At Salesforce: WOOL: While the LGBTO community has made some strides over the recent decades, the transgender community continues to face discrimination in employment, health, housing - you name it. They are at risk of increased bullying or mistreatment. How are you making the workplace safer and more inclusive for them? KC By putting action behind our words and building trust within this community. For instance, Dow today is one of the very few companies that offers coverage for transgender surgery and treatment. For more than a decade we have advocated openly about transgender issues. In 2008, Dow provided testimony to the U.S. House Subcommittee on Health, Employment, Labor, and Pensions, focusing on Transgender policies in the workplace. We continue to speak out on these issues. TP Transgender rights issues are human rights issues. We are committed to building communities both within our walls and beyond to create equality for this community. We not only provide benefits tailored to the needs of transgender employees, but we also create an inclusive environment to ensure all employees can come to work as their authentic selves. Some ways we do this include: WOOL: Initiatives like the Time's Up campaign have been formed to ensure that change actually happens. But will it? How will we know if/when it has? KC We'll know when we do interviews like this and the question no longer comes up! Your questions, tough and insightful, are a great barometer of the equality issues we're facing today, especially for people of color, women and the LGBTQ community. When you no longer think this question is worth the airtime, we know we can put this subject to rest. "I am an ally for all dimensions of diversity. It is not only part of my job, it is part of my life mission. The work of equality is a marathon, not a sprint." - Karen Carter WOOL: You are leaders at the forefront of change. What's your take on activism in the age of social media? A good tool for creating sustained pressure for change? KC Social media is only as effective as the thought and will behind it. It can be a democratizing force that gives voice to diverse groups. By giving voice, we inform and remind people that there are choices, that there are smart impassioned people at the forefront of issues and that everyone can contribute. Social media can be used effectively by large organizations, but also by small groups of people with a vision, a keyboard, Wi-Fi - and a commitment to asking why. "The fight for equality is about investing in human rights. I'm a proud ally and encourage others to join me in this journey. At Salesforce we've codified this into four simple actions - ask about others' journey, listen with empathy, show up for others, and speak up to amplify the voices and needs of those around you." - Tony Prophet WOOL: Brands have an enormous opportunity - to not just sell products - but to spark conversations. What do consumers expect today and what is the role that companies can play in changing behaviors and driving action? KC For me, it's about engagement, listening and doing our part to drive change through our example. Even though Dow is a B2B company, we are also attuned to the big issues that consumers care about. Through social media and forums, we are sparking the conversation around big issues like ocean waste, water use, energy efficiency and climate change - challenges we are trying to address through science solutions. People crave knowledge. They crave action. They want to influence both through their voiced opinions and purchasing power. TP At Salesforce, we believe that businesses are powerful platforms for social change. In a recent report, we surveyed over 1,500 consumers on their changing expectations and behaviors as it relates to business and societal impact. We found that 90% of consumers believe that companies have a responsibility to improve the state of the world. People want to work for and buy from companies that lead with a greater purpose and consider their impact on the communities around them. We have a responsibility to use our platforms to elevate the voices of others, empower the diverse workforce of the future, and stand up for the equal value of every human life. Industry: Karen S Carter Chief Human Resources and Chief Inclusion Officer of The Dow Chemical Company Tony Prophet Chief Equality Officer of Salesforce The insurance industry has tradionally relied on data sources such as claims history to underwrite known and measurable risk. In the early stages of the pandemic, the sudden shift to remote work triggered a flood of cybersecurity threats. Of the nearly 200 organizations surveyed in Wipro's upcoming State of Cybersecurity Report 2020, the majority (70%) report challenges maintaining endpoint security. Phishing scams spiked: 73% of organizations cite them as their top security threat. Not all companies were born digital, but they must now adapt to the digital demands of our world's current situation. As the wave of COVID-19 traverses across the world, business resilience has emerged as a strategic www.wipro.com/blogs/aubrey-blanche/ ---- Contact Wipro Blogs By Author Equal Footing Please fill the required details to access the content Aubrey Blanche How do we repay the diversity debt?

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### **EQUAL FOOTING**

----- Arcticle source ----- https://www.wipro.com/blogs/aubrey-blanche/equalfooting/ ---- About the Author Contact Wipro Related Blogs A New Generation Emerges in India's Evolving Payment System For a successful BFSI cloud transformation, build your complex landing zone right Modernizing the Core Banking System: Enabling the Future Please fill the required details to access the content Equal Footing March | 2020 This article was featured in WOOL. Last updated for Wipro.com on March 6, 2020. Aubrey Blanche, global head of diversity and belonging at software firm, Atlassian, is a former journalist and also, a former academic researcher focused on international security (terror and military operations). She decided to guit her Ph.D. and ended up working in the tech industry. There wasn't a method to the madness but as Blanche puts it, her career graph only makes sense in hindsight. Blanche, with her shock of pink hair, is often a misfit in boardrooms. Some might say she is the perfect crusader for diversity. "I like having pink hair, it is my vibe right now," she states simply. But there is no denying that pink and piercings are rare C-suite sightings. "When I look like this, it begins to broaden people's idea of what a leader should or should not look like. I know my job, I am confident of the value I can add as a professional and when you project that attitude, I think people are less likely to question your style." Blanche surely knows her job. She has been credited with crafting a vision and strategy that has helped Atlassian increase female representation in its technical workforce from 10% to 17% in the last three years, whilst also growing representation of people of color and employees over the age of 40. One might imagine she'd be excited to talk about diversity and inclusion in tech firms. But Blanche is not really enthusiastic. "Conversations on this topic started to gain ground around 2013. Despite talking about it for the last five or six years, there has not been much meaningful change," Blanche reflects. She points to a growing fatigue that has set in when it comes to talking about diversity and inclusion and says progress has stalled. "People are emotionally exhausted from pushing for change and not seeing enough progress," she says. Plus, because of the current sociopolitical environment, everyone is struggling with the depth and dimension of diversity issues and are easily overwhelmed, she adds. According to a report on the state of diversity and inclusion in U.S tech, commissioned by Atlassian in 2018: The mission at Atlassian is to move past the traditional understanding of inclusion and diversity and focus on something far more fundamental to human beings - a sense of belonging, something that Blanche says, can only be created. According to her, the sluggishness around diversity and inclusion stems from having the wrong conversations and following the incorrect metric. "Most companies are looking at corporate level statistics. If you have 50% women but all of them are in human resources or marketing departments, or perhaps at entry level positions, there is a problem," she says. This also does not translate to individual level action and contribution because the average employee does not know how to contribute to company level statistics something Atlassian deeply reflects on while tailoring its belonging programmes. Blanche offers a solution - equip individuals with skills

that make an impact within their sphere of influence and attempt to raise the collective standard of how people engage in the workplace. After all, belonging is often forged by small but significant aspects of human interaction; a greeting or perhaps, a gesture. "When the focus is on individual action and what one person can do on a daily basis to improve the team environment, there is much less chance of feeling fatigued or burnt out," notes Blanche; it is about using emotional intelligence and effective collaboration to create a team-level experience. And it is a win-win. Blanche says having more diversity on teams is gainful because it is proven that a diverse group of people are better at problem solving. But when companies do not take a team-level approach to diversity, they obviously miss out on the edge it offers. Blanche is a self-confessed data nerd. In fact, she strongly recommends a data informed approach; measuring and testing before figuring out a solution has been key to her implementations. True to her taste, Atlassian conducts an internal engagement survey of the inclusion index. Blanche explains the questions it asks and what it seeks to measure. One reason why Blanche propagates the expansion of diversity and inclusion to belonging is to create far more equitable processes. "At Atlassian, we have been intersectional from the start. We understand that individuals have layers. When inclusion refers to gender alone, it creates a silo. We include mental health, parental status, age, temperament differences - all of which, have a strong bearing on the feeling of belonging," she adds. For most people, the Silicon Valley is the birthplace of modern human existence, since most of life as we live it, is dominated by technologies. It is where we imagine our next 50 years are being envisioned; a place where young people (including college drop outs), wearing casual clothes and flip flops, are devoted to finding new frontiers. However, this is a Silicon Valley prototype. As Blanche points out, "Often this is the person who looks and behaves very much like the founder." There is no dispute on the contribution made to technological progress, innovation and human life but at the core, the disruptive work culture of Silicon Valley prides itself on meritocracy, warns Blanche. "People are often hired on the basis of schools they attend or their resemblance to the founder, etc. - not for their skill set," she explains. We constantly put one demographic on stage or in C-suites and we must stop, Blanche adds. In meetings, unconscious bias plays out when a woman is interrupted three times. "Because bias is unconscious, it cannot go unchecked. One has to be held responsible for both intent and action," Blanche opines. Hardwired prejudices are reflected in job descriptions too. "You will often hear job descriptions stating, we need a coding ninja! Leave aside that this type of messaging can be offensive to certain cultures, it also alienates a certain section of people who can perfectly fit the job. There is nothing wrong with just asking for a software engineer!" Blanche explains. Similarly, the slogan work hard, play hard does not resonate with someone who has three kids or outside responsibilities. "Question whether the language we use creates an enticing environment for possible candidates or even a compelling vision of what technology is or should look like," says Blanche. Bias can be a real bane to innovation, the strong suit of Silicon Valley. As Blanche puts it, innovation is fuelled by the ability to define problems and solve for them - this process necessitates new thinking and different perspectives; it cannot be mired in prejudices, which in turn, will show up in the solutions and technologies of the future, and ultimately, affect the quality of innovation. Women ask different questions; that they are

needed in executive levels has been said so often, it now nearly sounds tone deaf. Yet tech is always grappling with talent crunch and is on the lookout for female role models. Blanche does not undermine the need for the motivation female leaders can provide but insists we reconsider how we have talked about tech so far; what stories we have told and reiterated. "The first computer programmer was a woman but do we talk about her the same way we talk about Bill Gates, Elon Musk or Mark Zuckerberg?" she questions. Yes, the fact that the number of women computer science graduates has declined from some 35% back in the 1980s to just 17% is relevant in the talent-discussion. "The attrition rate of underrepresented people is much higher in organizations and to me, it sounds like a good problem to solve. We can keep churning out tech grads but if we don't invest in the environment they will work in, will it matter?" asks Blanche. Despite Atlassian's success rate, Blanche is right to point out that the fatigue surrounding diversity and inclusion needs an industry-wide addressal. "We must hold ourselves to the highest standards when it comes to nurturing talent and training for future leadership," she said. There is a common misconception that having a diversity and inclusion programme is tough, expensive and requires a lot of resources. But Blanche insists, building a culture of kindness takes zero dollars and runs on the will and desire of the founder. The diversity-debt, as she puts it, has accumulated because of consistent negligence. "When you de-prioritize working on something for a long time, it just becomes tougher to work on and achieve," Blanche signs off. Industry: India's payment journey has changed significantly over time. What started as a barter system has evolved into cashless payments Migrating your data and services to a public cloud service like Google Cloud offers multiple advantages, including increased flexibility and agility.... Traditional banks are reinventing themselves to meet rapidly evolving source ---- https://www.wipro.com/blogs/jennifer-morgan/ ---- Contact Wipro Blogs By Author Outside In Please fill the required details to access the content Jennifer Morgan Quantifying results on transformational https://www.wipro.com/blogs/gurbinder-randhawa/ ----- Contact Wipro Blogs By Author Transformation towards App-less banking Please fill the required details to access the content Gurbinder Randhawa Dr. Gurbinder Randhawa Consulting Partner for Wipro's Consulting Business in India. She has over 20 years of rich and diverse Consulting and Management experience across state-run and private run Enterprises. Her areas of specialization include Technology Consulting, Thought Leadership, Solution Theme Building, Practice and Business Development, and Strategy Design. She did her Ph.D. in ERP systems. Gurbinder has also authored several white papers and points of view on topics like Artificial Intelligence, Fraud Detection in GST, Trillion Dollar Economy, Banks of the Future, Cloud Adoption, and Digital Economy. She can be reached at gurbinder.randhawa@wipro.com. The Banking sector has entered a new phase, where customers expect seamless, personalized service on a "whenever" and "wherever" basis.

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## Transformation towards App-less banking

----- Arcticle source ----- https://www.wipro.com/blogs/gurbinder-randhawa/ transformation-towards-app-less-banking/ ---- About the Author Contact Wipro Related Blogs A New Generation Emerges in India's Evolving Payment System For a successful BFSI cloud transformation, build your complex landing zone right Modernizing the Core Banking System: Enabling the Future Please fill the required details to access the content Transformation towards App-less banking July | 2020 App-based banking to App-less banking The Banking sector has entered a new phase, where customers expect seamless, personalized service on a "whenever" and "wherever" basis. For the past few decades, banks have been moving customers toward the new ways of digital and self-service channels. This has given rise to Internet banking or Mobile banking through which a bank allows its customers to conduct financial transactions remotely using a mobile device and a multitude of applications. Banking transactions are done 'over-the-net', where a client has to enter into the bank's 'Digital Branch' rather than a physical branch. However, due to the nature, number, and complexity of banking applications, and issues like regular upgrading, patches, and connectivity, customers are a bit apprehensive about opting for an app-based banking environment. There are several other factors that impact app-based banking, such as the learning curve of customers associated with new technology, concerns about security compromises, or simply an unwillingness to start using technology. Some customers do not even get to download various banking apps for internet banking. This has prompted banks to conceptualize and bring in new concepts into banking, where app-less banking is emerging as a top contender. App-less banking simply refers to reducing the dependency of transactions on banking applications. Banks are moving toward simplifying their application landscape, reducing integration points, and using conversations for banking transactions. This move, from application-based transactions to conversation-based transactions, is called app-less banking. App-less banking platforms App-less banking platforms integrate data, applications and channels seamlessly, allowing banks to deliver multiple microexperiences over various channels like SMS and WhatsApp. This is enabled by delivering multi-domain business use-cases in an agile way that leverages modern application architecture principles. These platforms can be easily integrated for faster Cloud deployments. It enables banks to create and offer improved customer journeys ensuring issue resolution with minimum response time, resulting in higher level of customer satisfaction. Customers' queries can be directed to self-service modules by interfacing with SMS, a chatbot or WhatsApp, thereby empowering customers, improving response times, and reducing the load on customer service teams. Some solutions also offer to put text by customer on user interaction points e.g. text in "WhatsApp handle". These technology handles are able to understand and link user messages to a particular bank, indicating to the bank that it is an existing customer and responding accordingly using an OTP or biometric

authentication. Some of the solutions available in the market are from Mulesoft, Adobe, Google, and Amazon. Yes Bank has recently rolled out their app-less banking initiative as a part of their digital transformation strategy. It has collaborated with Karix Mobile to deliver app-less banking to their customers over a mobile browser using progressive web-app technology. Conversational banking enabling App-Less banking App-less banking is related to omni-channel banking, conversational banking and chatbot-based banking. Conversational banking is a way of banking where the banker uses AI-powered chatbots to text or speak questions or commands. It is the communication with the customer through voice/message-activated interfaces to enable a two-way digital customer experience. Customers do not have to download apps and their banking is done through the channel they like most i.e. chat. This type of banking brings financial information to customers through channels they are already using. The difference between banking apps and conversational interfaces is that it does not require users to learn their structure, navigation, and terms to perform banking operations. Banking-bots are instant messenger chatbots that interact with the customer's bank account. Abe, for example, connects to a bank through Yodlee, a financial data provider, using an encrypted token. These bots can tell users how much money is in their account, how much they spent on a particular type of expense and possibly create a budget. Chatbots serve customers regarding financial matters 24/7, helping them handle banking operations or even locating the nearest ATM for them. Chatbots are nothing but AI-powered intelligent personal banking assistants for customers. A chatbot can track customers' spending patterns and monitor transactions history. Artificial intelligence makes it possible to learn about a customer's spending habits and provide advisory about the customer's financial wellbeing. Chatbots also help in preventing fraud hence boosting customer confidence and satisfaction levels. Banking operations using chatbots enable customers to tackle issues in real-time and on their own. Erica, the smart assistant implemented by Bank of America allows customers to easily block their credit cards using a simple command, without a human agent. AI and machine-learning algorithms also analyze a customer's activity and predict what type of banking products can help them manage their finances. The bot can recommend those products to a customer on a chat supporting conversion. This is making banking more personal. AI customizes responses to different customers after analyzing their moods and accordingly addresses issues on chat. Examples of Conversational Interaction methods Messenger Apps Facebook, WeChat, Telegram, Slack, WhatsApp Voice Assistants Siri, Cortana, Alexa, Google Assistant Mobile Banking App Assistants BoA (Erica), USAA, Ally Assistant Internet of Things Smart cars, wearables, connected TVs Conclusion Banks that want to succeed in a digital economy need to make fundamental changes to the way they operate. Banks should prioritize responding to innovation opportunities and guickly convert them to customer services. However, the use of new technologies isn't a sure-fire guarantee of success for banks. They need to ensure that the mind-set of customers also changes and keeps pace with the speed of technology change. Emphasis has to be on simplifying things for customers and creating value for them in the age of digital disruption. App-less banking, conversational banking, and chatbots have a long way to go before they achieve their full potential. How easily customers will adapt to these new ways of banking remains to be seen. Will banks be able to convince

customers to move away from human conversations and start using bots? Will customers feel secure dealing with intelligent machines? How will data privacy regulations, legal compliances, and policy concerns be met? All these questions need deep evaluation. Also, intelligent systems are as effective as the data that is fed to them, which impacts their effectiveness. Integrating all systems with chatbots could prove to be expensive. It is also difficult for bots to understand the context of the conversation and nuances involved. References Industry: Dr. Gurbinder Randhawa Consulting Partner for Wipro's Consulting Business in India. She has over 20 years of rich and diverse Consulting and Management experience across state-run and private run Enterprises. Her areas of specialization include Technology Consulting, Thought Leadership, Solution Theme Building, Practice and Business Development, and Strategy Design. She did her Ph.D in ERP systems. Gurbinder has also authored several white papers and points of view on topics like Artificial Intelligence, Fraud Detection in GST, Trillion Dollar Economy, Banks of the Future, Cloud Adoption, and Digital Economy. She can be reached at gurbinder.randhawa@wipro.com. India's payment journey has changed significantly over time. What started as a barter system has evolved into cashless payments Migrating your data and services to a public cloud service like Google Cloud offers multiple advantages, including increased flexibility and agility.... Traditional banks are reinventing themselves to meet rapidly evolving customer expectations,

www.wipro.com/blogs/bill-stith/ ---- Contact Wipro Blogs By Author Heroes of Hardship: How Enterprises Can Rethink Human-Centricity in Times of Crisis Please fill the required details to access the content Bill Stith Bill Stith Senior Vice President and Global Head of Health Business at Wipro. Bill is a senior Healthcare and Technology Executive with over 27 years of experience in Healthcare, Life Sciences, and Technology domains. He has executive leadership experience in business development, product management, software development, consulting and managed services. Bill joined Wipro from IBM Global Services where, as Vice President of Healthcare and Life Sciences, he was responsible for IBM's US business with full P&L, Sales, Marketing and Delivery responsibilities. Bill spent the initial part of his career with HealthQuest which was later acquired by McKesson Health IT and following that has had a variety of leadership roles in the Healthcare and Technology sectors with Dell, LeftHand Networks (acquired by HP), SunGard and Dimension Data. Bill is an Electrical and Computer Engineer from University of South Carolina and currently lives in Denver, where he enjoys being outdoors in the mountains with his wife and three children. Surprisingly, it's a virus - and not a technological innovation - that's behind the biggest economic disruption of this decade. The COVID-19 pandemic cued a watershed moment for the global economy, and it's safe to say that life after it will not be the same ever again.

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### Heroes of Hardship: How Enterprises Can Rethink Human-Centricity in Times of Crisis

----- Arcticle source ----- https://www.wipro.com/blogs/bill-stith/heroes-ofhardship-how-enterprises-can-rethink-human-centricity-in-times-of-crisis/ -----About the Author Contact Wipro Related Blogs MESC 2022 Reflections: MMIS Modernization and Its Value to States E-Labelling: A regulatory mandate ensuring ease of business The Future of Well-Being: How Tech Will Impact Employee Healthcare Benefits Please fill the required details to access the content Heroes of Hardship: How Enterprises Can Rethink Human-Centricity in Times of Crisis July | 2020 Surprisingly, it's a virus and not a technological innovation - that's behind the biggest economic disruption of this decade. The COVID-19 pandemic cued a watershed moment for the global economy, and it's safe to say that life after it will not be the same ever again. Over the past few weeks, sharp agility in adapting to global disruption has emerged as a critical differentiator for maintaining business continuity amid the pandemic. From ensuring uninterrupted delivery to initiating innovation projects that can help address the ongoing crisis, effective response management has quickly become a cornerstone for operational excellence. But beyond all else, this disruption has unlocked a collaborative spirit and hidden reserves of resilience in people from all walks of life. At Wipro Health, for example, offices established 100% business continuity within 24 hours of the lockdown announcement. This achievement was possible, in part, due to our robust technological infrastructure, expertise, and processes - but more so because of the outpouring of spirit, empathy, and positivity from our employees. In fact, many of our team members drove hundreds of miles using their personal vehicles to commission remote working infrastructure at our associates' homes - a critical step to helping our pharmaceutical clients maintain undisrupted R&D operations and supporting the search for a cure to COVID-19. Similarly, Wipro Health teams were able to predict the situation 10 days in advance and mocked up a communication cascade with projects spread across four continents, helping establish 96% uptime on Day 1 of the lockdown. That's the kind of personal commitment and client centricity that's a hallmark of Wipro's working culture, and it's this human (rather than technological) response that's kept us and our clients operational through this crisis. Finding Solutions with Empathy For many employees, enforced quarantine and a blurring of the line that divides home and work lives have allowed us to see colleagues and friends in a more empathetic and humane light. At Wipro, a consequence of this shift in perspective has been a greater recognition of employee concerns and willingness to assess and fast track new workforce management paradigms It's important to take this perspective we've across the organization. discovered in our organization and extend it to our client relationships. By leveraging this empathy and understanding to create solutions that go beyond business concerns, we can tackle the unmet and

sometimes unexpressed needs and expectations of the people behind them. Putting on the Design Thinking Cap As the pandemic forces us to rethink operational frameworks and business models, it's important to recognize the opportunity inherent in such a situation - enterprises now have a sandbox to test larger operational initiatives that are in line with the new normal. In driving innovation, design thinking is a vital technique to establishing more human-centric models of workforce management. Instead of narrowing potential solutions down from a set of preconceived choices, a designthinking session prioritizes divergent thinking, encouraging participants to think outside the box, develop new solutions, and deploy those ideas to solve enterprise challenges. More importantly, by capturing views from a wide spectrum of organizational stakeholders, design thinking is able to bring human-centricity to the "solutioneering" process and deliver results that address both business requirements and people's needs. This practice is vital during a time of crisis when economic shutdown extracts a larger cost from the average citizen than an enterprise. From the organizational change management perspective, design thinking helps highlight the many concerns of an enterprise undergoing a fundamental shift in the way they conduct operations. It also helps establish new processes and paradigms that accommodate these concerns without compromising business outcomes. In turn, this creates an environment of trust and fearlessness that helps both people and business adapt to change faster and more efficiently. Uniting Through Disruption In a world where large-scale remote working and contingent workforces may be the new norm, the importance of establishing collaboration, empathy, and trust as the bedrock for future enterprise success cannot be overstated. And for both global and local businesses, this is an extraordinary time, calling for extraordinary and creative measures. Whether teaming up with the Azim Premji Foundation to deliver relief to frontline fighters against COVID-19 or instituting stringent disease prevention guidelines for our associates, Wipro is among the enterprises that are tackling the pandemic head on. At the same time, we are also preparing for a future where the nature of enterprise management will be profoundly different. Designing for the New Care From deploying change management workshops and finding new workforce alignment strategies to using our technological expertise for richer collaboration across geographies and different agents (Pharma, Paver. Provider, Medical Devices ) in the Health industry, we're helping the world get through this crisis in safer, more productive ways. Along the journey, we ask enterprises everywhere not to lose hope, but instead to upskill and rearm themselves. That way, we can all be ready for the day the crisis subsides and the economy bounces back. To learn how we can help you Design for the new care continuum, please write to us at Health.sbu@Wipro.com Industry: Bill Stith Senior Vice President and Global Head of Health Business at Wipro. Bill is a senior Healthcare and Technology Executive with over 27 years of experience in Healthcare, Life Sciences, and Technology domains. He has executive leadership experience in business development, product management, software development, consulting and managed services. Bill joined Wipro from IBM Global Services where, as Vice President of Healthcare and Life Sciences, he was responsible for IBM's US business with full P&L, Sales, Marketing and Delivery responsibilities. Bill spent the initial part of his career with HealthQuest which was later acquired by McKesson Health IT and following

that has had a variety of leadership roles in the Healthcare and Technology sectors with Dell, LeftHand Networks (acquired by HP), SunGard and Dimension Data. Bill is an Electrical and Computer Engineer from University of South Carolina and currently lives in Denver, where he enjoys being outdoors in the mountains with his wife and three children. This year's event was the largest gathering in the history of the Medicaid Enterprise System Conference (MESC) according to the New England State Consortium Organization (NESCO), the organizers of the event. Label and artwork management in medical device companies are still seen as an afterthought and therefore, there is not enough concentration as well as investment in this area. However, with new updates such as traceability (UDI) and elabeling, companies are compelled to invest time and money to be compliant on the regulations required. The employee healthcare benefits reckoning is here. The enduring impact of COVID-19 has converged with digital transformation - especially the accelerated advancement of data collection and analytics - to create sweeping changes in employee-employer relations. The chaotic pace of change in managing remote workforces and retaining top talent has placed an enormous strain on employers. Meeting bottom lines while addressing significant increases in employee healthcare costs and premiums can become an existential struggle.

### How to Recalibrate to Stay Relevant and Resilient in the New Normal

----- Arcticle source ----- https://www.wipro.com/blogs/satish-vaidhyanathan/how-to-recalibrate-to-stay-relevant-and-resilient-in-the-new/ ----- About the Author(s) Contact Wipro Related Blogs AI Driving 5G Innovations for Communications Service Providers Making ML Models in Banking Resilient using Adversarial Attacks Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Please fill the required details to access the content How to Recalibrate to Stay Relevant and Resilient in the New Normal July | 2020 History reveals how innovation has been at the forefront during any crisis. In fact, organizations that leverage innovation emerge stronger than their peers during crisis. In the current COVID-19 situation too, we see ample initiatives that demonstrate the power of innovation in dealing with unfavorable business conditions. For instance, sensing a dip in demand, some beer makers and distillers have shifted their production line to make hand sanitizers. Taxi aggregators are providing medical services to assist healthcare providers. A large auto manufacturer in

India is now using eight of its plants to assemble face shields, while some plants are also developing low-cost ventilators and manufacturing hand sanitizers. Likewise, a start-up engineering company in Italy is developing 3D printers to create valves used in ventilators. Crisis also breeds new partnerships that create a win-win situation for both the parties involved. Take for instance, pizza companies partnering with FMCG companies to deliver food essentials. Similarly, a large e-commerce player has partnered with a transport service provider to deliver essential goods to consumers. While other organizations are laying off employees, these companies are looking at hiring people to keep up with the demand. The fundamental theme in all these examples is to RECALIBRATE, keeping the purpose and organizational vision intact. It's about exploring new ways of working and opportunities to innovate, sustain, grow, and redefine the old models of process, and adapting to the new norm. In all the given examples of innovative initiatives, the core of the business has been retained, while organizations have recalibrated their processes to seamlessly adapt to the immediate needs of survival. During a crisis like COVID-19, the ability of organizations to sustain and grow through new innovative models significantly increases their brand value and customer value index in the market. Managing COVID-19 disruptions: Four key industry pain points Any innovation or partnership leading to a business transformation always involves transformation in technology too. During the pandemic, the primary focus for organizations across industries has been cost optimization and savings while addressing employee safety, minimizing disruptions to deliverables, and providing a superior customer experience. The four key areas of impact for organizations across industries are: The immediate reaction to the pandemic has been restrictions in investments on new technologies as CapEx investments get stalled due to cash flow challenges. Consequently, many organizations which were/ are on legacy technology systems face significant challenges due to remote workforce movement, inability to access data, emergence of security challenges, etc. The need for insights-driven decision-making for recalibration Rapid decision-making is a must in such situations as ensuring business continuity or exploring new opportunities require strong decisions. But what is required most is insights backing those decisions. For legacy organizations or the ones still in the modernization phase, deriving meaningful insights is their biggest challenge. Huge investments are required to set up an Analytics and artificial intelligence (AI) function and to use the latest technologies for solving real life problems. With industries facing uncertainties in cash flows, the best option is to opt for "As-a-Service" model wherein fixed upfront CapEx investments are converted into an OpEx model. This way, organizations can react to the immediate crisis, and recalibrate to explore, innovate and embrace new ways of working. An AI solution with pre-built industry specific apps and models that businesses can choose to explore and innovate on new use cases is the key to faster implementation. Fast-tracking AI implementation You can accelerate AI implementation with Wipro's Data Discovery Platform and "As-a-service" model. The platform provides features such as pertinent and actionable insights, Design Thinking and storytelling based visualization with prebuilt data models, and analytical models and dashboards powered by a low-code data science environment. (See Figure 1). The key benefits the platform offers are: Figure 1: Wipro's Data Discovery Platform Wipro helped customers recalibrate during the

pandemic to stay relevant by operationalizing existing assets and providing new avenues of growth backed by pertinent insights. Here are a few examples: Contact us to know how Wipro's Data Discovery Platform and "as-a-Service" model can enable accelerated AI implementation for your specific need. Industry: Satish Vaidhyanathan Practice Partner - Data, Analytics, & AI, Wipro Satish has over 20 years of data, analytics & AI consulting & delivery experience. He helps drive innovation, execute strategies, provide thought leadership in creating value propositions, manage new age partner related ecosystems, and supports analysts' relationships. Siddharth Rawat Consultant for Strategy & Planning function, Data, Analytics, and AI, Wipro Siddharth has an in-depth understanding of analytics and AI industry, together with market insights, competitive landscape and related ecosystems. He delivers advisory services and thought leadership for building value propositions and driving cohesive strategies. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force.

===========================----- Arcticle source ----- https:// www.wipro.com/blogs/manmeet-singh-marwah/ ----- Contact Wipro Blogs By Author Please fill the required details to access the content Manmeet Singh Marwah Practice Director – IoT & Smart cities, Cloud & Infrastructure Services Manmeet has over 18 years of industry experience in Cloud & Infrastructure services, including solution architecture, service delivery, strategic partnerships, and business development. As Practice Director, Manmeet is responsible for global presales and business development for IoT and Smart Cities portfolio cutting across verticals. Manmeet is passionate about leading and working on emerging technologies backed by his breadth of experience in bringing them to mainstream business.

# Wipro has returning to normalcy covered with Health COV-ER solution

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content Wipro has returning to normalcy covered with Health COV-ER solution July | 2020 The impact of COVID-19 has been devastating across sectors and industries. As the world is trying hard to restore normalcy, technology plays the role of a critical enabler, not just by helping most businesses continue with routine functioning, but also by providing safe environments for their workers and customers to return. Different challenges have emerged impacting various cross-sections of society, including citizens and city administrations, employees and employers, retail stores and their customers, passengers and airports, patients and hospitals, and so forth. Key issues include lack of information on workers' health status, timely updates on the outbreak and preparedness, mitigating the spread of fake news and content, observing social distancing rules, ensuring the availability of essential services, etc. Although markets have seen isolated solutions in various pockets address some of these challenges, there is an evident lack of a cohesive, strategic approach to the problem at hand as we struggle for clarity on the immediate future. At Wipro, we have proactively designed a customizable value proposition to address these challenges and ensure business continuity. Wipro's inventive Health COV-ER is a ready to deploy, cloud-based solution powered by Wipro's Smart i-Connect<sup>™</sup> IoT platform — a one-stop solution offering multiple use cases integrated under one umbrella. This dynamic solution provides a plethora of relevant features and comprises different themes based on users, challenges, and associated safety measures. Features across all themes include health declaration, thermal scanning, social distancing, face mask alert, crowd avoidance, occupancy monitoring, chatbot, and live chat support for pandemic-related policies and concerns. Themes include: Benefits of Wipro's Health COV-ER solution include: This solution integrates various systems smoothly to acquire data and enables monitoring and management with minimal or touchless human intervention. It includes automated rules-based incidence creation and SOP based workflows. The contactless architecture and smart analytics reduce the need for human intervention and enable guicker responses. Whether a second wave of the pandemic is likely to occur and how it could influence the way we work in the coming months is still unknown. As businesses start re-opening, having a safe and compliant environment, and handling future pandemics will be crucial. A flexible, iterative solution that addresses current challenges and offers future-proofing is an investment that organizations must make. Click here to download your copy of State of IT infrastructure report 2020 Industry: Manmeet Singh Marwah Practice Director - IoT & Smart cities Cloud & Infrastructure Services Manmeet has over 18 years of industry experience in Cloud & Infrastructure services, including solution architecture, service delivery, strategic partnerships, and business development. As Practice Director, Manmeet is responsible for global presales and business development for IoT and Smart Cities portfolio cutting across verticals. Manmeet is passionate about leading and working on emerging technologies backed by his breadth of experience in bringing them to mainstream business. In the evolving landscape of digital workplaces, efficient field service operations are critical in ensuring reduced downtime... appy employees usually stay at their jobs, frustrated workers often don't. Chief human resource officers (CHROs) tell us that the corporate leave of absence (LOA) process is one of the most common sources of employee frustration. Employees often rank their LOA experiences low on the

satisfaction scale, using descriptors such as complicated, confusing, inconsistent, time consuming, and unresolved. In a world where business is evolving at the speed of thought, rapidly changing market conditions pose several challenges for enterprises across industries.

www.wipro.com/blogs/ajay-bhaskar/ ---- Contact Wipro Blogs By Author What Success in the Next Normal Looks Like The 5 Business Trends Shaping the Next Normal Please fill the required details to access the content Ajay Bhaskar Ajay Bhaskar Global Head for Corporate Strategy and IP at Wipro. He is passionate about Strategy & Innovation and has 25+ years of experience in roles ranging from Corporate Strategy, M&A, Innovation, Sales & Business Development. In his role, Ajay is responsible for driving the Corporate Strategy charter for the Global IT business of Wipro spanning Strategy development, Strategy planning & engaging with the Board on the Strategy roadmap and Execution. He and his team lead key organization-wide strategic programs for Wipro. Additionally, Ajay is responsible for identifying, evaluating, and funding long-term bets for the company in emerging areas of opportunity. As part of the innovation agenda, he extensively engages with innovation ecosystems comprising start-ups, academia, expert networks and crowdsourcing platforms to leverage cutting-edge innovation for Wipro. He is a member of the Strategy Officers forum at the World Economic summit, representing Wipro. As part of leading the Global IP charter, Ajay is responsible for developing the products and platforms strategy for Wipro and accelerating growth through enabling incubation, driving innovative constructs, as-a-service models, and integrated plays. He is an Engineer by background and has an MBA from the founding batch of the Indian School of Business. Here's how companies' relationships with their customers, workforces, and supply chains will change as they adapt holistically to the new normal post-COVID. Several consumer and business trends will converge to shape the post-pandemic business world, but agility and digital transformation will be key above all. ==============

### Winning in the New Normal

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positive customer experiences. For example, expansive and trendy office spaces used to be a priority for many companies. Now, business leaders might decide to forgo expensive office space after learning that working from home can work just as well. Similarly, some companies that relied on rigid operational structures might now see the cost benefits of business process agility. They can begin to reallocate capital formerly invested in keeping legacy processes intact. All the decisions executives make around digital transformation, whether financial or operational, will affect key stakeholders, which reinforces the need to approach change from a holistic perspective. Here's how relationships with three key stakeholders might look moving forward. Each of these trends and changing relationships represents a holistic view of the next normal. Companies should respond holistically, as well, instead of focusing on one or two initiatives at a time. In addition, companies need to become more comfortable with reacting quickly to unknown factors. McKinsey describes developing a mentality in which your company responds to uncertainty like a "fast-twitch" muscle. If you practice reacting quickly, your reactions will become stronger and more efficient over time. By embracing the major challenges head-on with an agile mindset, your company will be better suited to thrive in the next normal. Industry: Ajay Bhaskar Global Head for Corporate Strategy and IP at Wipro. He is passionate about Strategy & Innovation and has 25+ years of experience in roles ranging from Corporate Strategy, M&A, Innovation, Sales & Business Development. In his role, Ajay is responsible for driving the Corporate Strategy charter for the Global IT business of Wipro spanning Strategy development, Strategy planning & engaging with the Board on the Strategy roadmap and Execution. He and his team lead key organizationwide strategic programs for Wipro. Additionally, Ajay is responsible for identifying, evaluating, and funding long-term bets for the company in emerging areas of opportunity. As part of the innovation agenda, he extensively engages with innovation ecosystems comprising start-ups, academia, expert networks and crowdsourcing platforms to leverage cutting-edge innovation for Wipro. He is a member of the Strategy Officers forum at the World Economic summit, representing Wipro. As part of leading the Global IP charter, Ajay is responsible for developing the products and platforms strategy for Wipro and accelerating growth through enabling incubation, driving innovative constructs, as-a-service models, and integrated plays. He is an Engineer by background and has an MBA from the founding batch of the Indian School of Business. The world is leveraging open source to drive innovation. But, what to do if you can't open source? Inner source. Several consumer and business trends will converge to shape the post-pandemic business world, but agility and digital transformation will be key above all. Open source is transforming how enterprise software is 

## Heads Up, C-Suite: The 5 Business Trends Shaping the Next Normal

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Wipro Related Blogs Sustainability and Resilience with Open Source: A Natural Fit What Success in the Next Normal Looks Like Six Reasons Open Source Is the Tool for Now Please fill the required details to access the content The 5 Business Trends Shaping the Next Normal August | 2020 The COVID-19 crisis has impacted every company in some way, and many will continue to be affected years from now. Business leaders are struggling to predict what the "next normal" will look like. One thing is certain: Companies will need to rely on digital infrastructure and technologies to create customer-centric, agile, and differentiated businesses. At Wipro, we believe that several fundamental consumer and business trends will converge to shape businesses in the post-pandemic world. For example, companies will face pressure to become more resilient and respond to crises more quickly, which will cause them to adopt automated digital approaches to their processes. Supply chains will be put under the microscope. Employees will have much different expectations of their employers, including assuming that employers can offer flexibility and remote work options. These pressures will function both independently and conjunctionally to influence the next normal. Of course, these pressures are not necessarily new, especially when it comes to digital transformation. But the COVID-19 pandemic will undoubtedly accelerate the outcomes, so Csuite leaders should embrace the development. The following five consumer and business trends will become key aspects of the next normal: Beyond corporate-led initiatives, market factors are proving that ESG priorities could be fruitful moving forward. In the U.S., almost 60% of ESG-centered mutual funds have outperformed the S&P 500 throughout the COVID-19 crisis. When this crisis passes, the world will certainly look different, and we will likely feel the business impacts of COVID-19 for a long time. There are multiple ways to embrace these trends, but agility and digital transformation will be key above all. Companies that embrace these emerging trends and integrate digital, flexible practices into their ongoing processes to increase business agility will come out winners in the long term. Industry: Ajay Bhaskar Global Head for Corporate Strategy and IP at Wipro. He is passionate about Strategy & Innovation and has 25+ years of experience in roles ranging from Corporate Strategy, M&A, Innovation, Sales & Business Development. In his role, Ajay is responsible for driving the Corporate Strategy charter for the Global IT business of Wipro spanning Strategy development, Strategy planning & engaging with the Board on the Strategy roadmap and Execution. He and his team lead key organizationwide strategic programs for Wipro. Additionally, Ajay is responsible for identifying, evaluating, and funding long-term bets for the company in emerging areas of opportunity. As part of the innovation agenda, he extensively engages with innovation ecosystems comprising start-ups, academia, expert networks and crowdsourcing platforms to leverage cutting-edge innovation for Wipro. He is a member of the Strategy Officers forum at the World Economic summit, representing Wipro. As part of leading the Global IP charter, Ajay is responsible for developing the products and platforms strategy for Wipro and accelerating growth through enabling incubation, driving innovative constructs, as-a-service models, and integrated plays. He is an Engineer by background and has an MBA from the founding batch of the Indian School of Business. The world is leveraging open source to drive innovation. But, what to do if you can't open source? Inner source. Here's how companies' relationships with their customers,

workforces, and supply chains will change as they adapt holistically to the new normal post-COVID. Open source is transforming how enterprise Arcticle source ---- https://www.wipro.com/blogs/kahly-berg/ ---- Contact Wipro Blogs By Author The New Era of Retail Has Arrived Please fill the required details to access the content Kahly Berg It is no longer a revelation that COVID-19 has deeply impacted the retail and experiential landscape. The retail industry has seen staggering declines since March, brought on by mandatory store closures and decreased consumer spending. Despite the impact, pockets of retailers who were already ahead of the curve in digital transformation have sustained strong sales. It's clear that COVID-19 has and will continue to demand unprecedented acceleration in the digital experience and virtual excellence. Retailers are at a critical juncture, where they must invest in solutions, and future-proof their brand, to flourish in this new environment. The way forward will require much more than a shortterm remedy, because the "new normal" of retail isn't temporary: It's here to stay. =============

#### The New Era of Retail Has Arrived

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customers will require a new model of interaction that is dependent on their level of comfort and the shopping preferences they have developed in response to the pandemic. While there is no "one size fits all" approach to the new landscape, there are three emerging personas that retailers can use to help guide engagement strategies. The first, Persona A, craves a sense of "normalcy", cannot wait to get back into stores, and will be willing to engage with store associates. This persona represents the minority, but it should be noted that they will be more willing to interact with a demo device or compare products and services in person. Consider Persona B: They are more hesitant to engage in physical spaces, and thus will require a different solution. Perhaps Persona B has an aversion to touching devices in the store but is receptive to an in-store QR solution that allows for a non-tactile experience. Then there's Persona C, who has shifted almost entirely to online shopping. While they no longer seek in-store experiences, they might readily embark on a virtual store tour customized to their retail preferences. For Personas B and C, retailers should consider virtual mobile stores and virtual concierge desks. These solutions would enable them to stay connected to the brand with peace of mind, while having access to new services, products, and store activities that they just don't get through traditional online shopping. A scan-and-go model, where customers can selfscan with a mobile payment option, would be a viable solution for Personas A and B, allowing a space for them to continue to visit stores, but with an added convenience option that accommodates the social distancing element required by Persona B. To navigate the way forward, it's crucial that retailers understand their customers and work to provide experiences that meet them where they are. As they continue to build on their digital transformation strategies, retailers should consider new ways of thinking about line management and point of sale, engaging with customers when they do step inside the store, and even AR experiences. By understanding each of their customers and their unique needs, retailers can create experiences that will engage each in a meaningful way at every point of their shopping journey, ultimately inspiring trust and confidence in their brand. The new era of connecting digital and physical is at a critical tipping point, and customer solutions are just the beginning. Consider the broader opportunities that emerge as retailers invest in digital transformation and the customer experience: COVID-19's presence has served as a constant reminder that the future is uncertain. Among the few things we can know for certain is that customers will not revert to their old ways, and consequently, neither will the retail industry. The current shift in landscape represents one moment in time, and there's no guarantee it won't be followed by other disruptions. If brands are not ready to adapt to the rapid changes as their customers do, they will be left behind. With a retail model rooted in the customer experience, sales, traffic, and engagement will continue to build and gain traction. The opportunity is here, and now the question is: Who will be willing to take it? Industry: The Metaverse is collapsing the physical and virtual worlds to create a paradigm shift in interactions between customers, suppliers, partners, employers and employees. It's every company's worst nightmare. In 2019, a global metals manufacturer experienced a ransom-ware attack in which hackers seized and encrypted its computer files, then demanded payment to unlock them. Agility as a concept has been discussed for years, though the competitive advantage of being more agile came into sharp focus in 2020. The increased

### The Role of Emerging Technologies in Driving Employee Engagement and Organizational Success

----- Arcticle source ----- https://www.wipro.com/blogs/veeralkumar-thakur/ the-role-of-emerging-technologies-in-driving-employee-engagement-andorganizational-success/----- About the Author Contact Wipro Related Blogs 4 Ways Super Funds Can Elevate Member Experience The CHRO Imperative for the Hybrid Workplace How organizations should identify and cope with the challenges to cultural transformation? Please fill the required details to access the content The Role of Emerging Technologies in Driving Employee Engagement and Organizational Success August | 2020 As recorded on July 13th 2020, there have been approximately 13.1 million victims of COVID-19 pandemic globally and sadly, the numbers are increasing each day. From leading corporate giants to local SMEs, booming startups to roadside ventures, irrespective of the industry and geography, all businesses are facing a challenging need to focalize on business continuity. Based on a study conducted by researchers at the University of Illinois, Harvard Business School and the University of Chicago, in the US, around 100,000 small businesses closed down permanently due to government lockdown and new regulations. This black swan event has been a major wake up call for all businesses. They have been relooking at their digital goals, with questions like, Are they 'digital' enough? Did their incumbent Business Continuity Plan work? Is more introspection needed to craft a better strategy for upcoming financial quarters? What are the actions that are critical to success? And how quickly? Employee engagement: Crucial to organization's success The pandemic has shifted the focus of all strategies to people and their health. With the new normal of remote working, employee engagement has become more relevant than before to ensure enhanced employee performance and superior business outcomes. Quantum Workplace defines employee engagement as the strength of the mental and emotional connection

employees feel towards their places of work. In a report prepared by Harvard Business Review, 71% of respondents ranked employee engagement as very important to achieving overall organizational success. Since long, organizations have been developing tangible ways to tackle the goal of improving employee engagement. The major inter-dependent factors leading to employee engagement are overall experience, cultural dynamics, career growth and personal development (See Figure 1). Best-practice companies have already developed measuring and monitoring tools for managing employee engagement better. Figure 1: Major factors for employee engagement Emerging Technologies: Empowering employees and business Largely, corporates are dealing with the challenge to understand the changing dynamics of employee engagement. The overall organizational strategy, working ergonomics, cross-functional collaboration between businesses add up to form a major part of employee's experience in an organization which directly affects the employee's engagement. Various researches concluded employee retention to be directly proportional to employee engagement, which directly affects organization's growth. Hence, corporates need to leverage emerging technologies not only to retain talent but also to improve performance and employee experience. Figure 2: Emerging technologies affecting organization's success via employee engagement Figure 2 explains the cycle of enhancement in employee engagement, which in turn improves the organization's performance. Technologies like Robotics/Intelligent Process Automation assist in automating mundane and repetitive tasks, which creates capacity in the workforce for productive work and overall cost reduction with adherence to compliances. UiPath, a leading robotic process automation (RPA) vendors, has saved over 700 man-days per annum for one of their professional services client while improving productivity and accuracy. Cognitive OCR (Optical Character Recognition) solution digitizes the document/invoice data for faster digital transactions with a cognitive decision-making algorithm. This frees up workforce from the data conversion task and reduces the overall handling time with accuracy. A dominant leader in the OCR space, ABBY, has assisted in creation of accurate and automated invoice processing system for a leading BPO organization with paperless environment Cloud & Analytics technologies not only help in data management and extracting meaningful insights from the underlying data but also suggest quick actions for the users through cognitive levers. Collaborative meeting solutions enable remote encrypted connectivity across organizations for seamless business communication and knowledge transfer. Hyperautomation solutions comprise of technologies like process automation with intelligent OCR and advance analytics, working in tandem to produce maximum use-case productivity and improving customer experience and satisfaction. The upcoming 5G market aims to subsidize the technology for deeper penetration across the globe. This will affect the efficiency of working remotely and boost employee productivity. The resilient future with digital We are enduring challenging times, wherein businesses need to create robust business strategies to survive and sustain. Deploying digital technologies would help make the businesses more resilient to impacts from disasters like a recession or a pandemic. Simultaneously, employees will also need to upskill to ensure they are competent enough to keep up with emerging market trends. The workforce needs to align with the organization's shifting mission and vision to be sustainable in the long run.

Emerging technologies like enterprise-level process automation with customer relationship management, hyper-automation using collective solutions of AI, ML, and RPA, and advanced analytics have been the vital drivers propelling industries towards improved efficiency and enhanced customer experience. It has affected the lives of employees across the globe in a better way. Organizations were always in need of digital technologies for enhancing efficiencies and the COVID-19 pandemic has acted as a catalyst in accelerating the transformation. Industry: Veeralkumar Thakur Assistant Manager - Solution Architect for Automation Solutions, Wipro Veeral is a technophile and technology evangelist with experience in designing end-to-end digital solutions. He is an MBA graduate in Strategy & Marketing from IIM Indore and holds a bachelor's degree in mechanical engineering from COEP. Despite the long-standing history of private pension plans, superannuation was introduced to Australians over 20 years ago to help them support their retirement in a financially viable way. Fast forward to 2020; it is now a A\$3T business. Over the last two decades, superannuation has become complex, highly regulated, and vulnerable to scandals. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just neglected culture.

=============================----- Arcticle source ----- https://www.wipro.com/blogs/dharanendra-murthy/ ----- Contact Wipro Blogs By Author Response to COVID-19: How Taiwan Got It Right Please fill the required details to access the content Dharanendra (Dan) Murthy Dharanendra (Dan) Murthy Practice Director & Business Head, Taiwan, China & South Korea, Wipro Dan Murthy has over 20 years of experience, and is managing business in the region covering Automotive, ASIC, Technology, and AI & IoT industries. He has been closely working with leading OEM, ODM and product companies. Taiwan's prowess in tackling the pandemic has revealed its resilience. The world now sees the potential Taiwan holds in the shifting economic landscape in the new normal

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## Response to COVID-19: How Taiwan Got It Right

---- Arcticle source ---- https://www.wipro.com/blogs/dharanendra-murthy/response-to-covid-19-how-taiwan-got-it-right/ ---- About the Author Contact Wipro Related Blogs Risk in the ESG Age Exchange of Cyber Threat Intelligence Among Peers Using Decentralized Identity Networks and IoFT Cybersecurity through collaboration Please fill the required details to access the content Response to COVID-19: How Taiwan Got It Right August | 2020 When the Coronavirus disrupted the world, Taiwan was expected to be severely affected considering its close proximity to Mainland China. A significant population from Taiwan, around 400K of 23 million, works in China, and over a couple of millions from China visit the country regularly as tourists. A massive outbreak in Taiwan seemed inevitable. Yet, Taiwan has

recorded very few cases - 451 positives with 7 deaths as of July 2020 significantly lower compared to other countries. Learning from past, quick decisions, & technology-driven strategy. Taiwan has been able to draw from its experience of the SARS epidemic of 2002. The country had the highest mortality rate in the world with 30+ deaths in the SARS outbreak. With great effort, SARS was finally controlled. Taiwan was the one of the first countries to activate epidemic prevention measures against COVID-19 leveraging technology. Early on, government instructed people to wear face masks and authorities started tracking and monitoring movements of patients at hospitals. Temperature checks were enabled and a 14-day quarantine was strictly imposed, which was timely and critical. Technology and Big Data along with artificial intelligence (AI) played an important part in tracking and tracing COVID-19 spread. Usage of Big Data Analytics for mapping COVID-19 suspects and tracking their origins was a crucial step towards halting major escalation in the country during the early stages. Taiwan's National Health Insurance (NHI) was connected with immigration and customs data server. This move was advantageous for customs and immigration department in Taiwan to closely monitor travel and make a data-driven decision on origin of flights and travellers, which classified travellers' exposure risk. Datasets of incoming travellers to Taiwan was built using mobile technology: QR code was implemented for this specific challenge. Travellers were asked to scan QR code on arrival at the airport and declare their status including symptoms and contact details. Technology was used in a multi-pronged approach, and local clinics and pharmacies were connected to the garnered information. This helped health officials to monitor all the triggers in real time. Travel histories and clinical symptoms were used to diagnose and treat the suspects accordingly. Some of the steps that powered their fight against the pandemic included: The successful fight against COVID-19 has brought in Taiwan the reputation of being a resilient country. With Taiwan demonstrating its capabilities in controlling the pandemic, other countries are looking at Taiwan as a safe and secure place for their business and have relocated larger teams from other countries. Wipro has been closely working with industry leading R&D organizations and Tier one OEM and ODM companies in Taiwan. The current global scenario of trade war between china and USA has given a positive traction for many companies moving out of China and relocate to Taiwan. We expect to see phenomenal growth in sectors like Semiconductor, Microelectronics (fabrication plants and foundries), Automotive, Healthcare, and Energy & Utilities. Recognizing the potential, Wipro is investing in right partnerships and expanding the infrastructure to support the growth in the region. Taiwan has battled COVID-19 with utmost preparedness and public transparency, with a strong focus on fostering global health security. Can we learn from this country's futuristic digital infrastructure - a robust and resilient model for a better future? Share your thoughts with me at Dan.Murthy@wipro.com Industry: Dharanendra (Dan) Murthy Practice Director & Business Head, Taiwan, China & South Korea, Wipro Dan Murthy has over 20 years of experience, and is managing business in the region covering Automotive, ASIC, Technology, and AI & IoT industries. He has been closely working with leading OEM, ODM and product companies. A tidal wave of ESG regulations is looming across markets. To prepare, companies are shifting responsibility for sustainability management and reporting to the risk management domain. Risk executives are investing in

enhancing their governance, risk management, and compliance (GRC) systems to account for ESG factors. The ability to exchange cyber threat intelligence (CTI) in privacy preserving and in a secure manner is vital for enterprises to manage their security risks effectively. During the pandemic, dependence on digital technologies has seen unprecedented growth. From managing remote workforces to catering for changing customer expectations, the paradigm shift towards digital has brought a host of ---- https://www.wipro.com/blogs/vidhan-singhai/ ---- Contact Wipro Blogs By Author Business and IT after COVID: A Wipro and Infor perspective Please fill the required details to access the content Vidhan Singhai Vidhan Singhai Global Alliance Manager, Wipro Limited Vidhan is a seasoned IT professional, with over 16 years of experience in the IT industry across varied sales, managerial, and technical roles. When not using his business or tech skills, you can find him fine-tuning his guitar skills or with a book. An insightful discussion between Cormac Watters, President and Head of International at Infor, and Sankar Venkataraman, VP & Global Head, Cloud 

## Business and IT after COVID: A Wipro and Infor perspective

----- Arcticle source ----- https://www.wipro.com/blogs/vidhan-singhai/ business-and-it-after-covid-a-wipro-and-infor-perspective/ ---- About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Business and IT after COVID: A Wipro and Infor perspective August | 2020 A few weeks ago, I had the opportunity to moderate a session where two leaders discussed some of the pertinent questions on our minds during these COVID times. Cormac Watters, President and Head of International at Infor, and Sankar Venkataraman, VP & Global Head, Cloud Enterprise Platforms at Wipro participated in this insightful discussion. Cormac opened by talking about Infor shutting down all their offices worldwide with all of their 17,000 employees working from home. Sankar spoke about how Wipro had done the same for its employees. From a business perspective, certain sectors like Retail had a much deeper impact. A few customers had to stop their transformation programs, with a few others even furloughing their employees. Most are very cautious about the next steps and re-evaluating their IT strategies given the uncertainties. Managing Customers Both Infor and Wipro leaders concurred that their customers had adapted to remote working quite well. One example that Cormac shared was of an animal feed company, with operations in over 21 countries that had "gone live across 21 countries just last weekend. Who would have thought we could do that by working remotely?" Customers are also noticing that the long travel times and conference room pilots are not required. However, this also means keeping applications as close to standard as possible. Sankar explained that across 60% of Wipro's business

that is application support, we have always been working from offshore. But now even the transformational projects are heading towards distributed agile and Wipro has implemented that for many of its customers through collaborative tools. He also echoed Cormac's views on customers adopting pre-defined, pre-configured SaaS applications and moving away from customizations. Products & Services Specific to the Current Situation Cormac talked about the four themes that Infor is working on - helping the world get back to work, providing a clean and safe environment, regaining visibility of the supply chain, and managing IT services. He cited examples of how Infor WFM is helping factories that are reopening in China with varied shift patterns, and how facilities management companies are deploying tools to educate people on basic things like putting on and removing PPE. Sankar talked about the supply chain command center that is available to customers who want to alter their procurement or distribution processes within 48 hours. He also complimented Cormac on Infor's GT Nexus platform, which provides immense flexibility to make tweaks to any supply chain. In a similar vein, Wipro has also set up an HCM command center where any changes to pay structures can be done very quickly. This is turning into more of a necessity as more and more customers are adapting to different talent acquisition models like contract hiring. Most Impacted Industries The leaders agreed on Retail, Airlines, Automobile, and Hospitality industries being the worst hit by the COVID-19 pandemic. Sankar observed that Manufacturing is opening up slowly in the Middle East, but is still not fully up and running in Europe and this may take time. He also suggested slower traction in the Energy sector, although the Utilities business is seeing signs of growth. Cormac noted that while the Healthcare industry is under duress, even the Pharmaceutical industry has had to ensure extreme efficiency, considering the fact that non-COVID patients and ailments can't be forgotten. Sankar opined that Medical Devices is an industry that's being really overworked right now, and Wipro & Infor can possibly use Infor's solution for this vertical to help customers in this domain. Changes in the Competitive Landscape Infor was fully acquired by Koch Industries recently, which puts it in a very cash-rich position and without any short-term pressure. It competes with SAP and Oracle, who have seen some challenges with the former losing one of its co-CEOs and the latter having to do a lot of equity management. Like other cash-rich companies, both Wipro and Infor are keenly looking at the dynamics of the smaller players to enrich their own offerings through acquisitions. Wipro is also offering its customers deferred payment options for bundled products and services with some of its partners. Using this, customers can continue their transformation journeys without worrying about cash-flow management. Predictions Related to a Restoration of Normalcy I guizzed the leaders on their predictions of how long the COVID situation will continue. While no one has seen the future, both agreed that this seems to be the new normal. They do fear a second wave coming in sometime around the winter of 2020, which Cormac termed as a W-shaped recovery (referring to the V, U, or L-shaped recovery that economists talk about). Sankar hypothesized that the recovery might vary geographically, with some countries recovering much sooner than others, but whoever does, will have to be extremely self-sufficient to change the buying and distribution patterns. IT Advice for Businesses The key piece of advice that leaders have for all companies is to accelerate cloud adoption, and go digital as soon as

possible. Sankar noted that for large enterprises that are already invested heavily in legacy IT systems, this may seem difficult, but most of them are already getting used to remote ways of working. They would also need to push for automation, particularly on application support. Mid-market companies need to do this as the first priority. And as this is going to be done at an unprecedented pace in the market, there will be a scarcity of resources like skills, network bandwidth, and financial resources. Cormac called out that with cloud, and to continuously reap the benefits of innovations, companies also need to focus on being as close to the standard as possible. Both leaders concurred that Infor's strategy of having products that are apt to the verticals that they are built for include the last-mile functionality and therefore, are well suited in such cases. CSR Contributions of Wipro and Infor Cormac talked about supporting hospitals, who are Infor's customers, by making the supply chain visible, via asset tracking, and other solutions during the COVID times. He also expressed that Infor found that monies are better spent through their own employees across the world who are making an impact at the local level, rather than simply giving it away to charitable organizations. He quoted examples of Infor employees working with local schools in India and helping to deliver food in China. Sankar spoke about Wipro's efforts in keeping the offices and kitchens open that helped in feeding the community, along with their contributions to government through the Azim Premji foundation. Industry: Vidhan Singhai Global Alliance Manager, Wipro Limited Vidhan is a seasoned IT professional, with over 16 years of experience in the IT industry across varied sales, managerial, and technical roles. When not using his business or tech skills, you can find him fine-tuning his guitar skills or with a book. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to reexamine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/atul-kapur/ ---- Contact Wipro Blogs By Author How IoT Can Pave the Way for the Device-as-a-service Model 4 Ways AI Can Solve Printing Industry Challenges How Augmented Reality Customer Support Helps Companies Please fill the required details to access the content Atul Kapur Atul Kapur Global Business Head - Compute Vertical, Wipro Atul Kapur leads the business for the Compute Vertical at Wipro. In this role, he drives key strategic relationships and provide leadership to scale the vertical. Atul is a well-rounded business leader with extensive international experience spanning strategic planning, country operations, global relationship management, alliances, business development, delivery and IT strategy consulting. With over 24 years of industry experience, he has an established track record of building teams across geographies with proven ability to lead business operations and relationships across US, Europe and APAC. In his previous role in Tata Consultancy Services he was a member of the core strategic leadership team entrusted with Global P&L ownership for identified large and strategic relationships in the Hi-Tech Business Unit. Atul has a Master's degree in Business Administration from Institute of

Management Studies & Research and a Bachelor's in Engineering from Panjab Engineering College. An advocate of industry-academia interplay, he has also spent time undertaking Executive Leadership Programs at Ross School of Business, Ann Arbor, Michigan. Laptop and printer makers can benefit from IoTand DaaS, which can revolutionize how they sell equipment and interact with customers. Here are 3 benefits. AI presents a key business opportunity to solve challenges in the printing industry. Here's how companies can apply the technology's benefits. AR offers huge potential to redefine customer service and support in terms of cost and customer experience, especially for the PC and peripherals industry.

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### Augmented Reality: Raising the Bar for Customer Support

----- Arcticle source ----- https://www.wipro.com/blogs/atul-kapur/augmentedreality-raising-the-bar-for-customer-support/ ---- About the Author Contact Wipro Related Blogs How IoT Can Pave the Way for the Device-as-a-service Model 4 Ways AI Can Solve Printing Industry Challenges Please fill the required details to access the content How Augmented Reality Customer Support Helps Companies August | 2020 The business of resolving customer's technology problems has been treated as a balancing act between providing a great customer experience and being cost-efficient. According to Gartner research, live customer support channels such as chats, emails, and phone calls cost U.S. \$8.01 per contact on average per contact. Compare that to self-service solutions such as mobile apps and selfhelp information on company websites, which cost a mere 10 cents per contact. Customers typically prefer these higher-cost resolutions, with only 9% solving their own problems with self-serve options. Every company wants to delight customers from an experience standpoint. But how do you make outstanding customer support cost-effective? Traditional methods that aim to save the company money typically do so at the cost of customer experience. Emerging technologies allow for alternative solutions. Augmented reality (AR) is one such technology. Redefining AR for Customer Support AR's interactive experience offers a huge potential to redefine customer service and support, especially for the PC and peripherals industry. Laptop and printer manufacturers can leverage this technology to train and assist field engineers once they are on the job. With the support of AR technology, field service engineers can carry out repairs more efficiently and access remote expertise for model-specific support. This benefits companies in two ways: First, it helps reduce technician error and increases first-time resolutions, thereby reducing costs drastically for the company. Second, more efficient resolutions will reduce frustrations for the customer, which will create a better experience. The application of AR for customer support is only limited by a manufacturer's creativity. In real-life scenarios, AR solutions can aid a relatively less experienced field engineer even if he or she has not worked on a specific model before. The field engineer can point a smartphone at a printer, for example, and the AR software will recognize the objects, images, and models. AR will add layers of virtual images, data,

and guidelines on top of the "real" object. The application can then guide the engineer through required repairs with step-by-step instructions, pointers, and tools. In this way, AR software operates narrating instructions in real time just as an experienced engineer or technical support staff would. If the field engineer is still struggling with the repair, the smartphone can dial into a remote senior experienced engineer to help. Beyond saving on repair costs, AR helps the customer experience. AR's ability to provide superlative customer experience is invaluable. There's something to be said for quickly repairing malfunctioning equipment so it's back in action. Customers will not have to hear the dreaded "We will get back to you" while engineers leave behind out-of-order devices. Manufactures can also create AR-supportive apps for customers to use on their own. Customers can access AR support on mobile devices, which provides simplicity and convenience. Companies can position these apps as fun, interactive, DIY solutions for non-complex issues, and the apps can be leveraged to make customers part of the repair process. This could provide some customers a feeling of achievement and satisfaction. In essence, AR technology can deliver significant cost savings, reduce operating time for field engineers, increase expert reach, and provide efficient training for new technicians. Customers will benefit from more efficient, faster repairs, or they can use AR support to cut out the middleman and fix their own devices. It's a winwin for both companies and customers, no matter how you slice it. Industry: Atul Kapur Global Business Head - Compute Vertical, Wipro Atul Kapur leads the business for the Compute Vertical at Wipro. In this role, he drives key strategic relationships and provide leadership to scale the vertical. Atul is a well-rounded business leader with extensive international experience spanning strategic planning, country operations, global relationship management, alliances, business development, delivery and IT strategy consulting. With over 24 years of industry experience, he has an established track record of building teams across geographies with proven ability to lead business operations and relationships across US, Europe and APAC. In his previous role in Tata Consultancy Services he was a member of the core strategic leadership team entrusted with Global P&L ownership for identified large and strategic relationships in the Hi-Tech Business Unit. Atul has a Master's degree in Business Administration from Institute of Management Studies & Research and a Bachelor's in Engineering from Panjab Engineering College. An advocate of industry-academia interplay, he has also spent time undertaking Executive Leadership Programs at Ross School of Business, Ann Arbor, Michigan. Laptop and printer makers can benefit from IoTand DaaS, which can revolutionize how they sell equipment and interact with customers. Here are 3 benefits. AI presents a key business opportunity to solve challenges in the printing industry. Here's how companies can apply the technology's benefits.

### 4 Ways AI Can Solve Printing Industry Challenges

----- Arcticle source ----- https://www.wipro.com/blogs/atul-kapur/how-aienables-print-as-a-service/ ---- About the Author Contact Wipro Related Blogs How IoT Can Pave the Way for the Device-as-a-service Model How Augmented Reality Customer Support Helps Companies Please fill the required details to access the content 4 Ways AI Can Solve Printing Industry Challenges August | 2020 The business landscape today is about optimizing experience and efficiency — and even something as commonplace as office printing is no exception. Printing and documenting can add considerable costs to a budget's operation column. As a result, companies are looking for better printing solutions. Thanks to advances in artificial intelligence and connected technologies, one of the biggest commercial printing industry trends has been the rise of managed print services (MPS), when companies outsource their printing needs to printer manufacturers through print-as-aservice. MPS has reduced operational hassle and created a better experience for the end user. Multifunction printers and networked devices provide data on a variety of metrics, including output quality, printed formats, toner consumption, ink levels, paper jams, and more. AI algorithms can use this data to make printing smarter, more efficient, and safer. In fact, here are some ways AI can help printer manufacturers provide better experiences to their customers: In short, AI presents one of the key business opportunities in the printing industry. The technology can offer insights that help companies predict user behavior, optimize print infrastructure, and make better print decisions, even at a user level. Solving Printing Industry Challenges With AI The convergence of emerging technologies and changing customer preferences have created difficult (but not impossible) situations for the printing industry. For instance, while AI has driven some improvements in threat-detection strata, cloud-enabled printer solutions are vulnerable to cyberattacks. This is especially true in the case of a mixed fleet of old and new printers. When embracing AI as one of the biggest commercial printing industry trends, companies need to invest more in understanding these risks and following up with a remediation plan. With the constant improvement in AI, the uptake and the scope for the printer industry keeps increasing. As AI gains momentum, companies will need to consider applying the benefits of these technologies to their products and services. A good starting point for AI-enabled print strategy is assessing vulnerabilities and complementing it with cost-effective, high-quality print outputs. Experienced partners can help reimagine the printing system, redefine operations, and hyper-automate processes through financially viable, seamlessly connected AI and cognitive computing-based solutions. When these solutions are tightly integrated with wider suites of technologies such as IoT, they can transform enterprise business operations. A service provider can also help build a comprehensive set of capabilities that can be used on top of the current transaction systems such as natural language processing, algorithmic intelligence, self-learning, and reasoning. The next generations of printers are evolving to capture data and leverage AI, IoT,

and cloud platforms. These insights provide elevated levels of customer experiences, save costs, and provide higher-quality services. The printer of the near future will go beyond a seamless fail-over to providing an entirely no-fail experience. Industry: Atul Kapur Global Business Head - Compute Vertical, Wipro Atul Kapur leads the business for the Compute Vertical at Wipro. In this role, he drives key strategic relationships and provide leadership to scale the vertical. Atul is a well-rounded business leader with extensive international experience spanning strategic planning, country operations, global relationship management, alliances, business development, delivery and IT strategy consulting. With over 24 years of industry experience, he has an established track record of building teams across geographies with proven ability to lead business operations and relationships across US, Europe and APAC. In his previous role in Tata Consultancy Services he was a member of the core strategic leadership team entrusted with Global P&L ownership for identified large and strategic relationships in the Hi-Tech Business Unit. Atul has a Master's degree in Business Administration from Institute of Management Studies & Research and a Bachelor's in Engineering from Panjab Engineering College. An advocate of industry-academia interplay, he has also spent time undertaking Executive Leadership Programs at Ross School of Business, Ann Arbor, Michigan. Laptop and printer makers can benefit from IoTand DaaS, which can revolutionize how they sell equipment and interact with customers. Here are 3 benefits. AR offers huge potential to redefine customer service and support in terms of cost and customer experience, especially for the PC and peripherals industry. =================

#### How IoT Can Pave the Way for the Device-as-a-service Model

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more places go paperless. How Printers and Laptop Manufacturers Are Already Using IoT to Profit Most new models of printers have the ability to connect to the internet, capture data about the device, and update the manufacturer about its usage. Companies can then use that information to provide customers a better service. For example, HP created the Instant Ink subscription service as a new method to tackle the age-old problem of replacing expensive printer cartridges. Normally, a customer runs out of ink and spends time shopping around for new cartridges — perhaps picking a third-party brand instead of HP. Now HP detects when users are running low on ink and sends out a cartridge in the mail. Not only is this convenient for customers, but it also provides HP with steady continued touchpoints with buyers. Laptop manufacturers are changing how they sell their products, too. Instead of a one-time \$1,500 price tag for a new laptop, some companies might offer \$50 per month for both the hardware and expert support and maintenance for the entire life of the laptop. Previously, this type of service might have been too costly, with consumers bringing in failed hard drives and dead laptops for replacement. IoT makes it possible to be proactive in maintenance and customer service. Why DaaS Is a Better Model for Printer and Laptop Manufacturers IoT and DaaS have the potential to revolutionize the way printer and laptop manufacturers sell equipment and interact with customers. If you're interested in trying out a better way to sell your products, here are a few benefits DaaS can offer: 1. DaaS can help you maximize efficiency. With IoT, companies can anticipate customer needs rather than just reacting. Manufacturers can regularly monitor the devices' health and create a preventive workflow around it. Collected data through real-time monitoring also can improve delivery time and increase efficiency by as much as 30%. 2. Connected devices enable you to craft a better customer experience. According to Gartner, 40% of customer service instances will come from connected device signals in three years. This means companies that offer products like an IoT printer or laptop can also offer a proactive customer experience. Connected devices provide a feedback loop that benefits research and development and customer service. Connected devices allow manufacturers to solve underlying issues rather than just treating the symptoms, creating an overall smoother experience for customers. 3. Sales and marketing can work smarter, not harder. Connected devices offer a digital thread that shows your customer's current behavior. This identifies opportunities for future sales to improve the customer's experience and allows manufacturers to create custom pricing options. That way, you can offer what customers truly need, instead of what you hope they'll want. The industry is already moving toward DaaS. Personal computers as a service, for instance, is expected to bring in \$141.6 billion in 2024. Other industries, such as home security and smart cameras, are also taking advantage of this model. If you're a printer or laptop manufacturer, now is the time to get on the ground floor of this new model. If you do, your customers will thank you — and so will your bottom line. Industry: Atul Kapur Global Business Head - Compute Vertical, Wipro Atul Kapur leads the business for the Compute Vertical at Wipro. In this role, he drives key strategic relationships and provide leadership to scale the vertical. Atul is a well-rounded business leader with extensive international experience spanning strategic planning, country operations, global relationship management, alliances, business development, delivery and IT strategy consulting. With over 24 years of industry experience, he has an established

track record of building teams across geographies with proven ability to lead business operations and relationships across US, Europe and APAC. In his previous role in Tata Consultancy Services he was a member of the core strategic leadership team entrusted with Global P&L ownership for identified large and strategic relationships in the Hi-Tech Business Unit. Atul has a Master's degree in Business Administration from Institute of Management Studies & Research and a Bachelor's in Engineering from Panjab Engineering College. An advocate of industry-academia interplay, he has also spent time undertaking Executive Leadership Programs at Ross School of Business, Ann Arbor, Michigan. AI presents a key business opportunity to solve challenges in the printing industry. Here's how companies can apply the technology's benefits. AR offers huge potential to redefine customer service and support in terms of cost and customer experience, especially for the PC and peripherals industry.

## Take Work to Talent: COVID-19 is Accelerating the Need for a New Talent Strategy in Middle East

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furloughs in the coming months owing to the disrupted demand and supply. However, for a region, that has been accelerating IT investments and digital transformation, setting new benchmarks in the field of happiness, and creating mega events like the Dubai Expo 2020 - the disruption caused by COVID-19 has created unique opportunities. Understanding the role of business culture in the Middle East Despite countries investing in digital transformation, the pace of adoption in the region as a whole has been slow. An element that could be holding the region back is the way trust functions as a cultural concept. Here, trust is deeply rooted in social relationships, making the challenge for growing digital, people related as opposed to technology. The Middle East was striving to strike a balance between imported expertise to leapfrog in the short term and training their own talent to build sustained transformation. Redefined talent models: COVID-19 as the catalyst for a new wave of growth. In the last decade, technology organizations have brought in the global delivery model for the region to leverage a global talent pool. Talent practices have transformed with dependency on Agile parameters that we have taken for granted. Most organizations use a distributed agile approach with collocated teams aiding face-to-face collaboration and impromptu meetings. They have leveraged practices like observational coaching, information radiators for easy swarming of defects, and identify opportunities for continuous flow to iteratively and incrementally deliver a product. But the pandemic will and has changed this and organizations in the Middle East are taking notice. The new mindset will give rise to 3 large trends that will help organizations reimagine their business for growth. Building a new age agile talent organization in the new normal Talent transformation is not possible by focusing only on people. Technology plays a crucial part. When unprecedented situations call for new ways of working, it is important for organizations to rely on partners who bring in the technical expertise and experience. For instance, Wipro Digital works on the Agile Anywhere principle that looks at five key facets and calibrates the existing norms around Infrastructure, Technology-Enabled Engineering Agility, Continuous Flow Practices, Ways of Working, and Collaboration. Agile Anywhere: 5 facets of the framework This approach helps: The talent organization is at the forefront of the crisis, and the Middle East has remarkable global examples of Agile leadership to look up to. The time is now to take the leap, learn from the world, and pivot to sustainable success. Industry: Lokesh Dhingra Head - Wipro Digital portfolio for Middle East Lokesh heads Wipro Digital portfolio for Middle East, and is based out of Dubai. He has 15+ years of professional experience and is passionate about people-centric design. With a customer-centric mindset and a penchant for data and insights, he is a keen proponent of "triple win" outcomes for organizations, clients and their customers. He believes in a pragmatic approach, achieved by curating capabilities at the intersection of strategy, design and technology. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to reexamine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

==== ---- Arcticle source ---- https:// www.wipro.com/blogs/sandip-sonje/ ---- Contact Wipro Blogs By Author Wipro's Field Service solution - Using Enterprise Asset Management to enhance operational efficiency & asset performance Please fill the required details to access the content Sandip Sonje Sandip Sonje Lead Consultant-Enterprise Asset Management; Cloud Enterprise Platforms-Wipro Sandip is a mechanical engineer with 13+ years of rich and diverse techno-functional experience in Plant Maintenance/ EAM & Reliability. He has a proven track record in dealing with industrial clients across the hierarchy with a strong process-centric approach to enhance reliability in their MRO (Maintenance Repair & Operation Function). Sandip has authored multiple research papers in international forums as well as blogs on Plant Maintenance, EAM, and MRO. Globally, water companies are looking to digitally transform their businesses, enabling much-needed service improvements across the value chain and operational efficiency. One of the key areas where digital can help is by allowing field technicians and back-office employees to work more 

#### Wipro's Field Service solution -Using Enterprise Asset Management to enhance operational efficiency & asset performance

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quick way to automate many of their manual day-to-day tasks. This solution has different personas like Operations and Maintenance managers, Planner, Scheduler & Field Technicians in the Water utilities space. One of the key features of the Infor EAM Mobility solution is its ease of integration with other applications. For one of Wipro's UK-based water customers, we were able to integrate the EAM solution with the company's SAP ERP Plant Maintenance, which was in turn connected to their CRM system. The integration was also done with other applications such as HMI, Fleet, GIS etc. to enable process administration across all systems. Wipro ran a pilot program to integrate the customer's existing CMMS (Computerized Maintenance Management System) based on SAP Plant Maintenance, with Infor EAM Mobility Solution. This integration helped Planners and Schedulers deliver resource planning and work schedule from the back office. Being able to identify the Field Technicians' GPS location of technicians, they were able to efficiently assign the relevant jobs only. The Field Technicians could receive their work orders for the day via their Toughbook, and accept or reject the task. Once accepted, their managers are able to monitor the real-time status of the work order, including estimated time of completion. With this solution, multiple paper forms have been replaced by a mobile application. Work scheduling and basic management tasks are fully automated, increasing productivity of Planner & Scheduler roles, in addition to making back-office administration more efficient. Benefits The benefits of digital transformation in various scenarios have been well documented. There are numerous benefits for the above usecase, such as: Conclusion A mobile-friendly and integrated asset management solution, such as Infor EAM Mobility, clearly has great potential to equip the field workforce with greater on-the-go insights and problem-solving capabilities. As many companies are investing heavily in digital transformation across the value chain, they should look at ready-touse, industry-specific, low customization, guick-to-implement tools to realize benefits quickly. Industry: Sandip Sonje Lead Consultant-Enterprise Asset Management; Cloud Enterprise Platforms-Wipro Sandip is a mechanical engineer with 13+ years of rich and diverse techno-functional experience in Plant Maintenance/ EAM & Reliability. He has a proven track record in dealing with industrial clients across the hierarchy with a strong processcentric approach to enhance reliability in their MRO (Maintenance Repair & Operation Function). Sandip has authored multiple research papers in international forums as well as blogs on Plant Maintenance, EAM, and MRO. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/buland-khan/ ---- Contact Wipro Blogs By Author Is your data center on the cloud yet? Why you need a smart-spend approach to IT infrastructure change Please fill the required details to access the content Buland Khan Buland Khan Distinguished Member of Technical Staff, and Practice Director - 5G Edge at CIS, Wipro Buland Khan is an adaptive leader

and technologist with over two decades of global experience in IT Transformation & Strategy, Practice Development, Enterprise Architecture, Advisory, Pre-sales, Project Management and Solution Design. Buland is involved in a range of next generation solutions under Wipro's Chief Technology Office themes, and his focus includes creating new offerings, monetizing IPs and use cases, and building teams, COE, ecosystem and partnerships. Buland is also a TOGAF certified professional with experience working across different verticals and sectors like BFSI, Retail, Manufacturing, Telco, Government, Automotive, IT & ITes, ENU, etc. He can be reached at buland.khan@wipro.com Can your IT infrastructure provide variability and business continuity even in the face of a crisis like COVID-19? Enterprises are using their budgets wisely by optimizing the current operating models and transforming it to drive IT-enabled business value

## Is your data center on the cloud yet?

----- Arcticle source ----- https://www.wipro.com/blogs/buland-khan/is-yourdata-center-on-the-cloud-yet/ ---- About the Author Contact Wipro Related Blogs Optimizing Field services Through AR Transforming the leave-ofabsence experience into an employee-retention tool A Smarter Way to Collaborate and Build Applications with Azure DevOps Please fill the required details to access the content Is your data center on the cloud yet? August | 2020 The data center, as we have known it for decades, with its servers, networks, storage, security appliances, racks, cables and power supply, is vanishing. The traditional on-premise data center is becoming the stronghold of legacy systems and services that cannot be supported elsewhere. As organizations go digital, everything from applications to Business Continuity Planning and Disaster Recovery are being virtualized at the hands of a mature breed of IaaS and PaaS services on cloud. The advantage of moving workloads from a traditional data center to cloud goes beyond making infrastructure invisible (and getting rid of the headache of maintenance): For our experts at Wipro who have followed the evolution of data center technology for over two decades, the signs are clear: Organizations are not investing in expensive hardware that is difficult to maintain, requires specialized skills, and cannot be retired easily when technology changes. At this point, you can ask yourself: Is your IT infrastructure ready to leverage new technologies like SDx, Containers, Artificial Intelligence, Blockchain and Internet of Things? Is it able to integrate with voice-based assistants for the ultimate user experience? Can it use automation to improve provisioning, monitoring, optimization and reporting? Can it provide variability and business continuity even in the face of a crisis like COVID-19? If the answer to the four questions is "No", your organization is a candidate for cloud and virtualization. We believe that more than 50% of large organizations will have moved the data centers to cloud in the next two years. But medium sized organizations have an even greater incentive to do so. Reason: They can have access to the same—or better—infrastructure than their larger competitors without upfront

investments on assets. This logic is supported by a survey we conducted recently across a broad range of industries. We asked respondents in our survey, which were the top investment areas in IT in the next 3 years. 79% said that the single-largest expense account would be data center cloud (IaaS and PaaS). 46% respondents also said they have distributed their workloads across two or more public cloud partners (Refer figure 1). Figure. 1 Another important question we asked our respondents was, should organizations consider cloud-first or cloud-smart approach or have a multicloud strategy? This and other valuable insights from the survey and research can be found in our State of IT Infrastructure Report 2020. This report investigates into what organizations are doing to ensure IT infrastructure provides business value. It looks at how automation, analytics, AIOps, microservices, open source, IoT, edge computing, collaboration, work from home, etc., are reshaping the world of IT infrastructure. The report is a must-read if your organization is ready to forge ahead and make IT infrastructure a partner in business success rather than a provider of functional services. Industry: Buland Khan Distinguished Member of Technical Staff, and Practice Director - 5G Edge at CIS, Wipro Buland Khan is an adaptive leader and technologist with over two decades of global experience in IT Transformation & Strategy, Practice Development, Enterprise Architecture, Advisory, Pre-sales, Project Management and Solution Design. Buland is involved in a range of next generation solutions under Wipro's Chief Technology Office themes, and his focus includes creating new offerings, monetizing IPs and use cases, and building teams, COE, ecosystem and partnerships. Buland is also a TOGAF certified professional with experience working across different verticals and sectors like BFSI, Retail, Manufacturing, Telco, Government, Automotive, IT & ITes, ENU, etc. He can be reached at buland.khan@wipro.com Click here to download your copy of State of IT infrastructure report 2020 In the evolving landscape of digital workplaces, efficient field service operations are critical in ensuring reduced downtime... appy employees usually stay at their jobs, frustrated workers often don't. Chief human resource officers (CHROs) tell us that the corporate leave of absence (LOA) process is one of the most common sources of employee frustration. Employees often rank their LOA experiences low on the satisfaction scale, using descriptors such as complicated, confusing, inconsistent, time consuming, and unresolved. In a world where business is evolving at the speed of thought, rapidly changing market conditions pose several challenges for enterprises across industries. \_\_\_\_\_\_

## Why you need a smart-spend approach to IT infrastructure change

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creating new offerings, monetizing IPs and use cases, and building teams, COE, ecosystem and partnerships. Buland is also a TOGAF certified professional with experience working across different verticals and sectors like BFSI, Retail, Manufacturing, Telco, Government, Automotive, IT & ITes, ENU, etc. He can be reached at buland.khan@wipro.com Click here to download your copy of State of IT infrastructure report 2020 In the evolving landscape of digital workplaces, efficient field service operations are critical in ensuring reduced downtime... appy employees usually stay at their jobs, frustrated workers often don't. Chief human resource officers (CHROs) tell us that the corporate leave of absence (LOA) process is one of the most common sources of employee frustration. Employees often rank their LOA experiences low on the satisfaction scale, using descriptors such as complicated, confusing, inconsistent, time consuming, and unresolved. In a world where business is evolving at the speed of thought, rapidly changing market conditions pose several challenges for enterprises across industries. www.wipro.com/blogs/chandramohan-muthuvaradharajan/ ----- Contact Wipro Blogs By Author Re-imagine Inventory Optimization with Industry 4.0 Optimize Plan-to-Produce Cycle leveraging Adaptive Scheduling with SAP Integrated Business Planning (IBP) Please fill the required details to access the content Chandramohan Muthuvaradharajan Chandramohan Muthuvaradharajan Senior Supply Chain Solution Architect, Wipro Chandramohan Muthuvaradharajan is Managing Consultant and Senior Supply Chain Solution Architect with over 20 years of global experience. He has wide experience in successfully transforming customers' supply chain with SAP APO, SAP SNC, S/4 HANA & IBP product applications. He currently leads SAP Digital Supply Chain Planning solutions for the CPG, high tech and manufacturing industries. He is also the product owner for Wipro's application monitor for monitoring complex process chains to deliver planning solutions into auto pilot mode. Modern manufacturers already faced many challenges - intense competition, evolving customer expectations, demand variability, inventory proliferation, and stringent regulations. ===========

# Optimize Plan-to-Produce Cycle leveraging Adaptive Scheduling with SAP Integrated Business Planning (IBP)

---- Arcticle source ---- https://www.wipro.com/blogs/chandramohan-muthuvaradharajan/optimize-plan-to-produce-cycle-leveraging-adaptive-scheduling/ ---- About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Optimize Plan-to-Produce Cycle leveraging Adaptive Scheduling with SAP Integrated Business Planning

(IBP) August | 2020 With the shift towards Industry 4.0, manufacturing companies are moving away from conventional processes towards a digitized model with an emphasis on smart factories with effective planning control systems. Conventional factory scheduling solutions were designed to deal with static situations within a factory manufacturing system. With the advent of digital and cloud technologies, it is now imperative to build agile and adaptive system solutions to handle modern-day manufacturing complexities. SAP and the Demand Driven Institute envisage an adaptive S&OP (Sales & Operations Planning) process for rapidly changing digital business environments, where adaptive scheduling is an essential ingredient. The objective of SAP IBP S&OP is to balance inventory, service levels, and profitability by arriving at a consensus across stakeholders of any planning ecosystem. A successful outcome of an IBP S&OP depends on how it is embraced smoothly from strategic to tactical and tactical to detailed planning and scheduling. Weekly/daily shop floor production plans are a subset of S&OP and further cascade to downstream processes such as shop floor scheduling. There are challenges to realize a good plan into a feasible finite schedule considering various hard and soft constraints, which could be dynamic in nature. To cite a few examples: In the CPG industry, handling of dynamic bottlenecks in the production line is a complex task and depends on various set up transitions and number of different finished products. In the discrete industry, tooling is a critical resource constraint in automotive component production. Ignoring this during scheduling might impact production plans and thereby customer orders. These critical constraints, which the scheduler encounters on a day-to-day basis, are not effectively handled by existing conventional tools. Wipro introduced a tool called Wipro's Manufacturing Adaptive Scheduler, built on the SAP Cloud Platform which can be integrated with SAP S/4HANA or ECC versions, to handle these critical constraints and accelerate the 'plan-to-produce' cycle. Wipro's Manufacturing Adaptive Scheduler acts as a conduit between planning and execution to help customers realize their IBP's S&OP plan into finite shop floor schedules by handling non-linear complex constraints. It provides accurate daily/sub-daily schedules, true bottleneck identification and the ability to handle dynamic bottlenecks resulting in flawless adoptability of a plan with more realistic shop floor schedules. Its accurate scheduling leads to complete capacity utilization of critical resources, 100% order fulfillment with more reliable order promise dates and lower TCO due to its lean implementation cycle and maintenance. Industry: Chandramohan Muthuvaradharajan Managing Consultant and Senior Supply Chain Solution Architect, Wipro Chandramohan Muthuvaradharajan is Managing Consultant and Senior Supply Chain Solution Architect with over 20 years of global experience. He has wide experience in successfully transforming customers' supply chain with SAP APO, SAP SNC, SAP S/4 HANA & IBP product applications. He currently leads SAP Digital Supply Chain Planning solutions for the CPG, high tech and manufacturing industries. He is also the product owner for Wipro's application monitor for monitoring complex process chains to deliver planning solutions into auto pilot mode. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an

effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

### Re-imagine Inventory Optimization with Industry 4.0

---- Arcticle source ---- https://www.wipro.com/blogs/chandramohanmuthuvaradharajan/re-imagine-inventory-optimization-with-industry-4-0/-----About the Author Contact Wipro Please fill the required details to access the content Re-imagine Inventory Optimization with Industry 4.0 April | 2021 Modern manufacturers already faced many challenges - intense competition, evolving customer expectations, demand variability, inventory proliferation, and stringent regulations. During the past 18 months, they've added one more to that list: the risks associated with unplanned catastrophes and black swans. Effective inventory management, a robust supply chain, and smart inventory planning are no longer necessary simply to survive in a complex environment. The pandemic has shown that they also provide a critical foundation for their adaptable and resilient future. These issues are driving the urgency for digital transformation and Industry 4.0. The Industry 4.0 Vision Industry 4.0 goes beyond smart manufacturing. Done well, it combines physical production and operations with smart digital technology, machine learning, and big data. The ultimate aim is to create a holistic and connected ecosystem that focuses on optimizing value across manufacturing and supply chains. The complex but digitized operating model enables companies to stay connected with real-time insights into customers, products, competitors, and the overall business climate. SAP's strategy for Industry 4.0 is more than smart manufacturing in factories and plants. It is connecting production with processes across the supply chain. Industry 4. Now is SAP's strategic investment to help customers transform the manufacturing business and become future ready. It's a vision for more unique and disruptive outcomes spanning various industry verticals. SAP's Industry 4. Now revolves around four themes: Intelligent Products, Intelligent Assets, Intelligent Factories, and Empowered People. Multi Echelon Inventory Optimization for Smarter Planning Conventionally, spare parts planning is done through various software applications in an isolated manner. The critical machine level nuances and inputs are not modeled as part of the problem. This delivers siloed planning recommendations like safety stock norms that may not be pragmatic to implement and still need significant manual intervention. An approach is needed that addresses this gap to make spare parts an integral component of the connected network (an intelligent asset network) within the principles of Industry 4.0. Intelligent assets can be leveraged along with integrated business planning to deliver optimized industrial replaceable items using the Multi Echelon Inventory Optimization (MEIO) capabilities of SAP IBP. This approach enables modeling of MEIO for spare parts to calculate the recommended safety stock. MEIO helps organizations optimize inventory levels across distribution networks with multi-echelon planning - even in a global

organization. A MEIO solution suggests the right levels of inventory at each stage of the supply chain by simultaneously optimizing inventory across multiple echelons and locations. For the multi-echelon algorithm to work effectively within the SAP IBP application, there are three critical parameters: service level, lead-time variability, and demand variability. Figure 1 provides a guick overview of the MEIO model that can compute safety stocks as one of its critical outputs after optimization. A supplier node is connected with the warehouse, which in turn is integrated with the customer node (or customer facing node) in a supply network. Figure 1: MEIO model The complexity of planning inventories for replaceable industry items include: quantity of safety stock with associated costs; cost of industrial equipment failure; how the stocking nodes are designed; cost of redundancy and obsolescence; and other dependencies such as OEM dealers, lead times, etc. Reimagining the MEIO Model Now, re-imagine the same multi-echelon model by replacing the customer node with equipment. The equipment can be a single asset or group of assets that act as the "customer" in the re-imagined multi-echelon model. Again, the challenge is to compute the service level associated with each replaceable item for the equipment or asset group. Leveraging the Industry 4.0 paradigm, the intelligent asset network using IoT sensor data can be translated as an equipment service-level factor, which is a key ingredient for MEIO. In effect, it means a health check of equipment, with data provided by the IoT sensors. Figure 2: Re-Imagined MEIO model The re-imagining of the conventional multi-echelon into asset based MEIO improves the accuracy of the replaceable safety stock calculation by reducing the uncertainty of critical resource downtimes. This is done by computing the relevant safety stock planning of spares in an interconnected asset framework. Crafting the scenarios associated with various aspects of safety stock planning can be designed using SAP IBP application. Leverage Templates for Further Gains with MEIO Wipro has designed specific scenarios relevant to the replacement industrial items business model using IBP. These scenarios leverage the capabilities of the re-imagined MEIO to reduce inventory costs and improve service levels. The ready-made templates expedite demand planning by leveraging this SAP IBP model solution and can be implemented 20% faster than normal implementation timeframes. For organizations with complex inventory supply chains, the MEIO model provides greater visibility, resulting in improved demand planning, reduced costs across the supply chain, and streamlined operations. MEIO takes a step further towards optimizing service levels while minimizing inventory costs. Chandramohan Muthuvaradharajan Managing Consultant and Senior Supply Chain Solution Architect, Wipro Chandra has over 20 years of global experience successfully transforming supply chains with SAP APO, SAP SNC, SAP S/4 HANA & IBP product applications. He currently leads the SAP Digital Supply Chain Planning solutions for the consumer packaged goods (CPG), high tech, and manufacturing industries. Chandra is also the Product Owner for Wipro's application monitor for complex process chains to deliver planning solutions into auto pilot mode. ============== ----- Arcticle source ----- https://www.wipro.com/blogs/bianca-ghose/ -----Contact Wipro Blogs By Author Why 2020 Will See the Birth of the 'Trust Economy' Please fill the required details to access the content Bianca Ghose Bianca Ghose Chief Storyteller, Wipro Bianca Ghose is the Chief Storyteller for Wipro. She also heads marketing globally for Wipro's Consulting

### Why 2020 Will See the Birth of the 'Trust Economy'

----- Arcticle source ----- https://www.wipro.com/blogs/bianca-ghose/ why-2020-will-see-the-birth-of-the-trust-economy/ ----- About the Author Contact Wipro Related Blogs Re-Imagining Dispute Management with an Integrated Digital Strategy The New Private Equity: Creating Value Quickly and Reliably Through Digital Transformation Security token offerings: Will it be a game changer for the capital market? Please fill the required details to access the content Why 2020 Will See the Birth of the 'Trust Economy' When we look back at the COVID-19 pandemic of 2020, we August | 2020 will see not just the human and economic loss inflicted by the virus, but an important gain - a growing global awareness of the value of trust. As companies coped this spring with plummeting demand, anxious employees and volatile costs, it became increasingly clear that leadership priority has shifted to maintaining the trust of all stakeholders. As with the financial crisis of 2008, survivors in the long run will tend to have the equivalent of a strong immune system; not only in their balance sheet, but in the level of trust they have been able to develop with their stakeholders. Working together, apart We found this spring that we had to learn afresh about building trust, from afar. The jury is still out on how to build and regain trust in a world where our collective health depends on how good we are at staying apart. One of the things I have learnt in the past four months is the value of spending a little extra time with my colleagues and clients in addition to our business discussions - not with any specific agenda in mind, but just to see how they are getting on during this difficult time. While these short off-topic conversations are not the best substitute for in-person conversations, they have had one positive dividend: they have given me a much greater understanding of the lives of my colleagues and customers as individuals than I had before the pandemic. Recently, for instance, while on a video call, a senior executive's son walked into the frame, and so I asked him to come chat with us. A few months ago, this might have been slightly embarrassing for everyone, but now the three of us had a nice chat about everything, and nothing. Meeting my colleague's son and adding that contextual information to my knowledge of his life enriched our working relationship. With travel curtailed, I have not been able to meet with people as I usually do. To compensate, I have invested much more time in video

calls. Adapting to this new style of management has been a challenge, because when it comes to working during a global pandemic, I am as much a freshman as the rest of the human race. A time for patience These windows into my colleagues' lives have also reminded me of the challenges everyone faces today. Whether they are living alone or with small children, or with anxiety about their older relatives' health, most people have a lot on their plate at the moment. For the at-home professional, their day job is one of many priorities. As managers and colleagues, we need to be patient with each other and allow people to set some of their own boundaries and timelines so that they are able to manage work and home life. To do that will require a stronger commitment to building a greater level of trust in all our professional relationships, be they with colleagues, clients, investors, or regulators. Achieving this trust will demand an unprecedented level of transparency from all of us. Whether you are a manager being frank about next year's uncertain prospects or a worker explaining that the project is going to be late because your mother isn't well and needs your constant support, if we face our challenges together with candour and patience, we can still succeed. Obviously the work still needs to be done, but we need to give everyone the flexibility they need to take care of all their responsibilities. Such flexibility means stepping back from micromanaging. Focusing on hours worked (and when) never did make a lot of sense as a way to manage people, but now, with a semi-remote workforce, it is no longer even practical. Instead of monitoring 100% of employees for the misbehaviour of 5%, we will need to find ways to manage that difficult 5%. Managers today must focus more on outcomes, not on hours. Workers too will need to cut their managers some slack, recognizing that they are new to coping with the pandemic. Team members can reward their leaders' flexibility by doing the best they can under the circumstances, and by stepping up for the team. There is no "they" In the end, the success of distributed work will depend on distributed trust. We can't wait for 'them' to learn how to do things differently. There is no them; there is only us. From here on out, every top-performing enterprise will succeed only if we build a strong culture of personal responsibility. What this means is that 'they' don't work at your firm - individuals do - and we can make changes by taking the initiative to drive them ourselves. Now more than ever, top-performing cultures demand everybody's best efforts and best ideas. Industry: Bianca Ghose Chief Storyteller, Wipro Bianca Ghose is the Chief Storyteller for Wipro. She also heads marketing globally for Wipro's Consulting Business, and as an inclusion champion, serves on Wipro's Inclusion & Diversity Council. Bianca leads strategic storytelling at an enterprise level and champions the shift to creative storytelling. A former journalist, Bianca's experience spans news, digital content and marketing communications strategy. She is passionate about education and serves on the Advisory Board of a Ek Kadam Aur Foundation, a not-for-profit that supports primary education and health programs for underprivileged children in the Asia Pacific. This blog was originally published on the World Economic Forum Online purchases are on the rise, and with them, so are fraud and disputed payments. The Global Capital markets is still recovering from the 2008 crisis; the regulatory burden has sapped the energy out of capital markets. In US alone, Wall Street is seen as the quagmire for gambling and loss by political pundits, however significantly, capital markets fund 65% of the US economy therefore the dependency on capital markets as whole is

something that cannot be ignored ======== Arcticle source ---- https://www.wipro.com/blogs/ritesh-shrivastava/ -----Contact Wipro Blogs By Author Media Monitoring and Insight Services -How you can cut the clutter and reinvent your business model for better ROI Please fill the required details to access the content Ritesh Shrivastava Ritesh Shrivastava Practice Director, Wipro's Digital Operations & Platforms Ritesh Shrivastava is the Practice Director for Wipro's Digital Operations & Platforms business in Europe, based out of London. He serves as the leader and evangelist for driving digital transformation programs for Wipro's key customers within the Media, Retail & Travel industry segments. With over 15 years of globally diversified experience, Ritesh has been instrumental in building and driving the large transformational programs in North America and Europe. He has a Bachelor's degree in Electronics Engineering from Rajiv Gandhi Technical University and a Master's degree in Business Administration from Amity University in India. A well-structured media monitoring program empowers companies to make decisions with the latest facts and figures and enables them to take action and control brand https://www.wipro.com/blogs/ritesh-shrivastava/media-monitoring-andinsight-services/ ---- About the Author Contact Wipro Related Blogs 4 Ways Super Funds Can Elevate Member Experience The CHRO Imperative for the Hybrid Workplace How organizations should identify and cope with the challenges to cultural transformation? Please fill the required details to access the content Media Monitoring and Insight Services - How you can cut the clutter and reinvent your business model for better ROI August | 2020 A well-structured media monitoring program empowers companies to make decisions with the latest facts and figures and enables them to take action and control brand reputation. Since information spreads fast through social media, companies need to identify them in real-time to monitor and predict their growth. However, performing media monitoring on the web and social web is both time consuming and effort-intensive. This is why today's digital world is a tough place for providers of media monitoring and insight services. Often, an unattended comment on a social media platform from a consumer can spiral into creating negative sentiment and impacting business performance. The key challenges faced by these service providers are measuring impact, proving value and demonstrating return on investment (ROI). This requires real-time monitoring software, expertise and dynamic visualization, which may be cost-intensive and affect ROI. Further, this gets compounded due to intense market competition with a crowded space of service providers operating at lower margins and where barriers to switching are even lesser. It does not help that service providers also have to contend with a fragmented landscape of different systems, often legacy processes and teams, which may be a result of several acquisitions across different geographies. Media monitoring providers need to address these challenges with a fresh, more integrated approach to technology as well as operations. One that adopts smart technologies, ideally a single platform and new higher-value services without hurting the bottom line, while making sure that the local culture and language nuances are taken care of. This requires a factory model for delivery that consolidates country centric operations into relatively more centralized operations. Doing this along with process standardization for common processes with accommodation of local nuances will help simplify the operations. These operations will be

supported by teams organized by language and function, rather than by geography, which allows better cross-skilling and brings in more scalability. This frees up the remaining in-country teams to focus on customer support and sales, ensuring better ROI. It is critical that the operations are supported by a common platform that have hyper automations built in with advanced analytics. A single integration layer will allow the ingestion of content from across all channels, making it easily available to current and future downstream services. Content augmentation through tagging, summarization and sentiment analysis is automated through a combination of a Boolean rules based engine together with cognitive and Natural Language Processing (NLP) methods. In the case of quantitative analysis, we see the potential for almost 100% automation, while the more qualitative work will continue to require some level of human intervention, although much reduced and likely to be further impacted as cognitive and NLP engines develop. With the creation of a virtualized workforce of software robots to enable seamless automation for routine reporting and workflow activities, design thinking led AI enablement and simplification of processes to eliminate redundancies, companies can expect realizable savings of over 40% in addition to the increase in operational agility. Furthermore, a transformation like this will place media monitoring companies ahead of their competition to deliver high quality insights fast and at a significantly lower cost. Given the challenging business landscape, unpredictable demands and falling profitability, this is something surely worth considering. Industry: Ritesh Shrivastava Practice Director, Wipro's Digital Operations & Platforms Ritesh Shrivastava is the Practice Director for Wipro's Digital Operations & Platforms business in Europe, based out of London. He serves as the leader and evangelist for driving digital transformation programs for Wipro's key customers within the Media, Retail & Travel industry segments. With over 15 years of globally diversified experience, Ritesh has been instrumental in building and driving the large transformational programs in North America and Europe. He has a Bachelor's degree in Electronics Engineering from Rajiv Gandhi Technical University and a Master's degree in Business Administration from Amity University in India. Despite the longstanding history of private pension plans, superannuation was introduced to Australians over 20 years ago to help them support their retirement in a financially viable way. Fast forward to 2020; it is now a A\$3T business. Over the last two decades, superannuation has become complex, highly regulated, and vulnerable to scandals. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just neglected www.wipro.com/blogs/rama-chandra-murthy/ ---- Contact Wipro Blogs By Author Data Modernization Essentials Toolkit Please fill the required details to access the content Rama Chandra Murthy Rama Chandra Murthy Practice Leader and Lead Architect for the Data Analytics and Artificial Intelligence practice at Wipro. He works closely with client architects, project delivery teams, and consulting teams to ensure the success of technical integrations as part of joint customer solutions. In his previous role, he worked as Practice Head for the Data Virtualization practice at Wipro. Big data is driving the development of applications in today's

#### Data Modernization Essentials Toolkit

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we are helping organizations across the globe in their journey to become Intelligent Enterprises, leveraging data, analytics, and artificial intelligence (AI). Industry: Dana Groce Global Senior Partner Manager for Technology Partnerships at MongoDB. She works closely with product management, engineering, and sales teams to ensure the success of technical integrations as part of joint customer solutions. In her previous roles, Dana worked at early-stage startups, learning how technology is a fundamental component in modern organizations. Rama Chandra Murthy Practice Leader and Lead Architect for the Data Analytics and Artificial Intelligence practice at Wipro. He works closely with client architects, project delivery teams, and consulting teams to ensure the success of technical integrations as part of joint customer solutions. In his previous role, he worked as Practice Head for the Data Virtualization practice at Wipro. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. www.wipro.com/blogs/david-kenner/ ---- Contact Wipro Blogs By Author Leading the Path to Recovery and Resilience Please fill the required details to access the content David Kenner David Kenner Senior Partner & Global Head, CIO Strategy & Advisory, Wipro Digital Consulting David Kenner is one of the founding members of Wipro's consulting organization. He currently heads up the CIO Strategy and Advisory team. He brings more than 25 years of Business & IT management and leadership, spanning multiple industries including Financial Services, Consumer Products, and Media/Telecom. Mr. Kenner is a frequent speaker at Enterprise Architecture and other industry conferences. Not all companies were born digital, but they must now adapt to the digital demands of our world's current situation. As the wave of COVID-19 traverses across the world, business resilience has 

#### Leading the Path to Recovery and Resilience

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traverses across the world, business resilience has emerged as a strategic avenue. CIOs are especially critical in this process because IT strategies influence many important aspects of business like the workforce, security and automation. Going forward, Hi-Tech companies must evaluate the pandemic's impact on these three fronts and prepare for the short-term while also developing new capabilities and ways of working for the longterm. Recently, I had an opportunity to moderate a panel on business recovery and resilience in the Hi-Tech industry with Rashmi Kumar, CIO of HPE, and Adhir Mattu, CIO of Marvel Semiconductor. Here are some highlights about how CIOs can catapult their organizations beyond the current crisis with a coherent and comprehensive IT strategy. The Challenges of Change COVID-19 had a global impact on most organizations' operations and workforce regarding safety, mobility, productivity, engagement, and security. The biggest challenge CIOs face today is managing virtual work while balancing the safety of the employees with security aspects for the company. They must sustain secured operations and adopt new communication/collaboration strategies to maintain workforce productivity. The key is to combine productivity with capabilities. CIOs need to focus more on cloud, manufacturing, and supply-chain capabilities in order to build a resilient enterprise. "It's showtime for all of the capabilities that companies have built over the years," says Rashmi. The Rising Remote Work Many companies are reporting a rise in productivity and employee satisfaction as a result of remote working. For employees working remotely, collaborating with their peers has become difficult in the absence of robust and accessible platforms. Access to appropriate resources is necessary for the workforce to conduct operations like before. However, this can be hard to fulfil, since these resources are defined by the requirements of the work at that moment and can lie outside of an organization's current line of sight. For organizations and Internet Service Providers (ISPs), the challenge now lies in provisioning more connectivity to residential areas, where the work from home influx is higher. Another key challenge area is leveraging technologies such as the cloud, which can run business-specific applications for employees to access from remote locations. For work that's ineffective or impossible to perform remotely, a possible solution involves collaborating with HR teams and sourcing common work venues. Companies need to take a hybrid approach where a part of the workforce is working remotely while remaining associates can work at a common place. This will ensure productivity while keeping the operational costs low. "Moving workloads to the cloud brings agility and scalability to our services," says Adhir while talking about dashboards and data analytics that provide improved visibility into business operations. Cyber-Intelligence CIOs across industries need to mitigate the security risks that come with additional exposure, self-service, and automation. Rashmi believes enhanced monitoring, reporting, and controls give insight in user behaviour, which helps in pre-empting possible security threats. An interesting approach that companies can adopt is 'Protection-Detection-Recovery.' Cyber-security is certainly a board-level discussion, and it can't be tackled one-way. "Training modules for employees are equally necessary alongside robust IT solutions to create a 'Human Firewall,'" explains Adhir. CIOs need to move from a reactive defensive posture to a proactive mode of cyber security. A Partnership Culture The COVID-19 crisis has made every CIO struggle with delivering business results amid cost pressures. Innovating with engineering teams and

maintaining collaborative relationships can give a competitive advantage to companies. Strong internal and external partnership networks can increase productivity in terms of reducing cycle times and costs significantly. Adhir suggests a 3C model to co-innovation: Competency, Credibility, and Common Goals. Increase competency by partnering with the right talent, earn credibility by delivering what is promised, and achieve cost and revenue targets by aligning common goals. Many companies have started rolling out 'Partner Programs' to bolster simple and scalable IT strategies and avoid silos. Proliferation of AI AI and automation play an important role in bolstering security, reducing costs, and helping enterprises remediate vulnerabilities and interruptions to digital business operations. "AI is not just a cost play -- it's a reliability play," says Rashmi. Companies don't have enough eyes, arms, and legs to perform the amount of computation required today, so they need to make systems smarter. It is fascinating to see how AI helps in solving problems at first place, and if it exceeds its capability, it directs the problem to the right human being. All of this is done virtually, increasing the overall productivity of the company and avoiding long wait times for customers. Many companies have started using digital virtual agents to communicate with bots to achieve higher levels of automation and productivity gains. Companies must focus on business and IT resiliency continuously. This pandemic represents an opportunity for CIOs to make rapid, well-informed decisions and expedite arrangements to safeguard their workforce, mitigate business disruption, and ensure that critical operations continue. Informed decisions can build trust, resiliency, and a culture of innovation, while poor decisions could pose a real reputational risk. Industry: David Kenner Senior Partner & Global Head, CIO Strategy & Advisory, Wipro Digital Consulting David Kenner is one of the founding members of Wipro's consulting organization. He currently heads up the CIO Strategy and Advisory team. He brings more than 25 years of Business & IT management and leadership, spanning multiple industries including Financial Services, Consumer Products, and Media/Telecom. Mr. Kenner is a frequent speaker at Enterprise Architecture and other industry conferences. The insurance industry has tradionally relied on data sources such as claims history to underwrite known and measurable risk. In the early stages of the pandemic, the sudden shift to remote work triggered a flood of cybersecurity threats. Of the nearly 200 organizations surveyed in Wipro's upcoming State of Cybersecurity Report 2020, the majority (70%) report challenges maintaining endpoint security. Phishing scams spiked; 73% of organizations cite them as their top security threat. Banks/NBFCs (Lenders) and other traditional lending financial institutions find themselves operating in times where it is all about how well they know their customers, and how they can use this knowledge to grow their lending business.

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Author Cloud Marketplaces: A game-changer in software procurement
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Sindhu Vidyasagar Manages Global AWS Alliance for Wipro Sindhu
Vidyasagar is a cloud aficionado and manages the AWS alliance for Wipro
globally. She is a seasoned business development executive with broad
experience in developing and executing on creative go to market initiatives
and strategic alliances. She is passionate about combining the right tools
and people to drive business and success for customers and partners.

Customers are always looking for ways to boost productivity. And one surefire way to magnify all business developments is through easy-to-use software and services. As customers adopt technologies like cloud and become more agile, their expectations around the speed and efficiency of software procurement and fulfillment also increase.

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#### Cloud Marketplaces: A gamechanger in software procurement

----- Arcticle source ----- https://www.wipro.com/blogs/sindhu-vidyasagar/ cloud-marketplaces-a-game-changer-in-software-procurement/ ---- About the Author Contact Wipro Please fill the required details to access the content Cloud Marketplaces: A game-changer in software procurement September | 2020 Customers are always looking for ways to boost productivity. And one sure-fire way to magnify all business developments is through easy-to-use software and services. As customers adopt technologies like cloud and become more agile, their expectations around the speed and efficiency of software procurement and fulfillment also increase. They need to purchase and deploy the required software solutions in days and not weeks. In the traditional software procurement cycle, customers have to go through the steps of discovering the right solutions, testing, creating Proofs of Concept, establishing value, securing budget, and obtaining legal approvals before they can even get started with extracting value from their investments. Many major cloud service providers (CSP) recognized this business opportunity and launched their respective Marketplaces. Cloud Marketplaces have caused a paradigm shift in how customers find, buy and use enterprise software. This online store accommodates and fosters the growth of their services from third-party providers that have built their own solutions on top of the CSP's platform. With a plethora of products, these marketplaces have solutions for infrastructure, DevOps, business applications, machine learning, data, Internet of Things (IoT), security, storage, and much more to help customers augment their cloud journey. Cloud Marketplaces offer a win-win solution for customers as well as the independent software vendors (ISV) and global system integrators (GSI) that sell their solutions on the platform. Cloud customers now have a wider palette of products and solutions that fits their needs. The ease with which customers can get through the software procurement and consumption cycle is unparalleled. Ease of consumption along with integrated experience across hundreds of services in the cloud platform is driving a virtuous cycle of adoption and stickiness. There are flexible consumption and contract models (free-trials, pay-as-you-go, hourly & monthly, annual & multi-year, 'bring your own license', sellers' private offers, and consulting partners' private offers) on these marketplaces that are transforming the way cloud users transact and consume these services. On the supply side, the visibility and reach that the product of the ISVs/GSIs can get in this ecosystem is exceptional. The cost for these vendors has reduced orders of magnitude and they are able to quickly build and scale offers on this agile platform. These marketplaces have evolved from being just catalogs to full-fledged

value chain. Adding features of popular e-commerce websites that support a growing buyer/seller community, promote a diversity of products and services and drive sales will increase the user adoption of cloud marketplaces. There is ample potential for future spends on cloud platforms that no software vendor can ignore. With the spread that the marketplace is able to bring together, customers are today spoilt for choices. As an Amazon Web Services' AI/ML marketplace launch partner and a leading GSI in the cloud space, Wipro also has its marquee AI/ML solutions on the AWS marketplace. Embarking on a cloud journey requires a great deal of planning, with many considerations to be made at the stage of software procurement itself. Keep in mind that there are several resources and partners available to guide you in this transformation and Wipro, as a Premier Consulting AWS partner, is one of them. Wipro can help you bring your vision to life and support you on this exciting initiative. Industry: Sindhu Vidyasagar Manages Global AWS Alliance for Wipro Sindhu Vidyasagar is a cloud aficionado and manages the AWS alliance for Wipro globally. She is a seasoned business development executive with broad experience in developing and executing on creative go to market initiatives and strategic alliances. She is passionate about combining the right tools and people to drive business and success for customers and partners. www.wipro.com/blogs/shalak-b-mendon/ ----- Contact Wipro Blogs By Author What Can Cloud Based Video Analytics Do for Sportspersons? Please fill the required details to access the content Shalak B Mendon Shalak B Mendon Senior Executive, Wipro HOLMES® Shalak helps clients across various domains transform their IT and Infrastructure operations through automation and AI solutions. In his current role, he is involved in the presales function within the Wipro HOLMES® and Automation Ecosystem. Video analytics as a service will deliver sportspersons the competitive edge 

### What Can Cloud-Based Video Analytics Do for Sportspersons?

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of sports and athletes. With the use of video analytics, athletes will be able to measure themselves against competition and find areas of improvement, if any. The framework can be customized to a particular sport and key metrics can be defined accordingly. Framework for AI-led video analytics in sports The framework emphasizes on three different areas - recording the video during the event, followed by competition analysis, and finally, training analysis. From data collection point of view, it will provide both options of near real-time analysis and post-match analysis. From an analysis point of view, it will provide both, competition and training analysis. In competition analysis, it will concentrate on post-match analysis like generating performance profile of every athlete, creating a comparison among players based on different parameters, and analyzing how these affected the overall result of the match. In training analysis, it will concentrate on checking the progress of athletes by creating custom drill sessions to improve the athletes' weaknesses to achieve optimal performance. How does this framework work? To begin with, we will collect data on performance of athletes using video recordings during the live sport event. The recorded videos will be uploaded into the video analytics application. For this process of data collection, on the hardware front, we will need access to the video recordings by professional camerapersons or we can use any portable cameras. The cameras need to be calibrated appropriately in accurate angles to cover the movement of athletes in the field. The data collected then will be uploaded real time or after the match to the cloud for processing via mobile application or website. The next step involves analysis of the data captured. To begin with, we will use facial recognition to identify the athletes. The analysis can be performed on near real time or after the event. Necessary key performance metrics will be extracted. Goals and objectives will be set and the performance will be measured against these. Coaches and athletes together can decide on desired goals according to their needs. These KPIs will vary with different sports. Some of the common metrics include overall average athlete speed, distance and trajectory. Some of the sports-specific KPIs include number of passes made by a player, basket count, accuracy in case of football and basketball. The concluding step is to provide analysis in the form of interactive dashboards that deliver real time feedback and help the athlete to improve his/her activity. The dashboard will be available via the mobile app on the device. The athlete will be capable of continuous improvement via accurate tracking of progress. The way forward Some of the key challenges in enabling AI-led video analytics for sportspersons include appropriate infrastructure availability i.e. video cameras and related accessories, servers to run the algorithms to analyze the performance data if cloud is not preferred, the accuracy of algorithms to provide appropriate information, and good connectivity for real time analysis. The inferences drawn with analytics can also keep the sports fan engaged and connected. Fans around the world will be able to follow their favourite teams and athletes and virtually be part of their journey. The growth of smart wearables market will greatly complement the analysis using video analytics in the foreseeable future. Industry: Shalak B Mendon Senior Executive, Wipro HOLMES® Shalak helps clients across various domains transform their IT and Infrastructure operations through automation and AI solutions. In his current role, he is involved in the presales function within the Wipro HOLMES® and Automation Ecosystem. Chaitra Babu Rao Senior Project Engineer, Wipro HOLMES® Chaitra is a

Pre-Sales consultant for Wipro HOLMES® AI Automation Platform. In her current role, she works towards understanding and improving clients' operations methodology by identifying automation opportunities. Financial Services is one of the most challenging industries from a technology standpoint. Digital business transformation is now critical to the survival of virtually every organization, but effective change management must center on people. Successfully implementing automation systems might never be "easy," but platforms and solutions have emerged to make it as frictionless https://www.wipro.com/blogs/domenic-j-champa/ ---- Contact Wipro Blogs By Author Managing and Mitigating Supply Chain Risks Please fill the required details to access the content Domenic | Champa Domenic | Champa GTM Practice Head Americas - Supply Chain, Wipro Limited. Domenic has 25+ years' experience in business transformation, process improvement, and supply chain strategy, specializing in Manufacturing, Planning, Procurement, and Network Design. Dom is experienced in ERP systems, both on premise and SaaS to facilitate transformative change. If the recent pandemic has demonstrated one thing, it is that companies, large and small, are woefully unprepared for a supply chain disruption. The economic impact has been devastating on a global scale. The chart below demonstrates just some of the global economic disruption. Imports of just products from China experience over a 35 percent decline just within 4 months. Those declines 

#### Managing and Mitigating Supply Chain Risks

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Essentially, they provide a digital twin of a company's manufacturing operations, allowing for a fast and efficient concurrent planning scenario to solve complex problems. One such platform is Kinaxis. It's a single integrated tool, allowing for visibility across your supply chain that performs with a concurrent approach to planning, eliminating silos, and facilitating fast decision-making in times of disruption. As companies learn the lessons from this most recent pandemic, we expect to see planning tools similar to the one above that help to mitigate even the most serious supply chain disruption in the future. Industry: Domenic J Champa GTM Practice Head Americas - Supply Chain, Wipro Limited. Domenic has 25+ years' experience in business transformation, process improvement, and supply chain strategy, specializing in Manufacturing, Planning, Procurement, and Network Design. Dom is experienced in ERP systems, both on premise and SaaS to facilitate transformative change. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern source ---- https://www.wipro.com/blogs/manish-prasad/ ---- Contact Wipro Blogs By Author Banking on technology in the post-COVID world Please fill the required details to access the content Manish Prasad Manish Prasad Vice President and BU Head - India - Private Run Enterprises (PRE), Wipro Limited Manish has over 23 years of experience in IT services industry. In his current role at Wipro, he has a charter of enabling Wipro as the most preferred transformational catalyst partner for enterprise customers by providing cutting-edge, end-to-end technology solutions and catapulting them toward attaining their business goals. He drives the India business unit to accelerate its revenue, growth, and profitability across verticals through deeper customer engagements, strategic partnerships, business development, delivery operations, and governance. He is a result-oriented and accomplished professional, with significantly diversified experience ranging from managing business units to leading strategic customer programs across geographies. The COVID crisis created some unique challenges for the Indian banking industry, posing such questions as how do we continue to serve customers in a contactless world?

### Banking on technology in the post-COVID world

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the Future Please fill the required details to access the content Banking on technology in the post-COVID world September | 2020 The COVID crisis created some unique challenges for the Indian banking industry, posing such questions as how do we continue to serve customers in a contactless world? How do we manage operations and performance with a reduced and remote workforce? How do we optimize costs while ensuring operations continue uninterrupted? Can our systems even handle the increased loads of online transactions? Are we secure enough? However, even as banks grapple with these questions, the pandemic has given them a unique opportunity by disrupting business as usual and opening doors for innovative thinking. Pre-COVID, there were two main areas of focus for Indian banks: enhance digital to improve user experience and business outcomes and contain costs to mitigate margin pressures. These continue to remain the levers on which banking innovation in the new normal needs to happen. And technology will play a key role in addressing these concerns. Does your IT strategy align with business goals? This is the right time for Indian banks to ponder the question, "How well is our current IT strategy working to deliver long term business transformation and innovative operating models?" **Technology** investments should be prioritized around front-office transformation, backoffice responsiveness, enterprise-wide data management, and a flexible, robust, and scalable IT that delivers on business KPIs. In the quest for quick wins, we often forget to focus on the long game. It's easy enough to deploy point solutions to solve a specific problem. You can do sporadic cloud engagements, a contact center upgrade, or even a work from home solution specific to the pandemic. However, that would probably leave you with a complex mess of systems that don't talk to each other. A holistic transformation requires a deep dive into all business areas, and one of the first steps toward such a change is to identify what's core to the business and what's not. For Indian banks, this means looking into the business's KPIs and what needs to change to deliver on those KPIs. Setting the right priorities The McKinsey's Global Banking Annual Review 2019 advised banks in India to begin their journey of reinventing their business models by outsourcing non-differentiated cost drivers to third parties. Think of it this way. Normally, a large bank would spend hundreds of millions of dollars buying, deploying, and managing IT assets through a multi-vendor strategy. That's a non-core activity because banks are not supposed to run IT shops. This approach leaves them with disparate IT systems that drive up costs. time, and effort to maintain. Can this be done better? Of course! IT assets needed to run the business can be streamlined by taking a total outsourcing approach with an end-to-end picture in mind. Getting an IT outsourcing partner on board can significantly reduce the total cost of ownership while improving efficiency and performance. Often, the decision to outsource is hindered by the desire to protect existing investments in IT assets. However, there are business models in place that can help banks monetize these noncore assets while outsourcing the run. At Wipro, we work with our clients on a unique business model, investing in their existing IT and non-IT infrastructure and recovering the cost over time. Consolidating the vendor landscape can also reduce cost overheads significantly. We've delivered a 15-20% cost advantage for our customers and helped our private banking clients in India to compete better and achieve operational excellence. Building competitive advantage with zero-based budgeting The current IT landscape has a significant cost takeout potential. Still, it needs a bold step -

such as reframing the IT strategy and outsourcing for efficiency - to free up the capital. This capital can now be used to make new investments and fund change initiatives to build resilience, improve responsiveness, and move toward total digital banking. Is your bank ready to take the transformation leap? How is your digital journey shaping up in the new normal? I'm hoping you will discuss with me at https://www.wipro.com/contact-wipro/. Industry: Manish Prasad Vice President and BU Head - India - Private Run Enterprises (PRE), Wipro Limited Manish has over 23 years of experience in IT services industry. In his current role at Wipro, he has a charter of enabling Wipro as the most preferred transformational catalyst partner for enterprise customers by providing cutting-edge, end-to-end technology solutions and catapulting them toward attaining their business goals. He drives the India business unit to accelerate its revenue, growth, and profitability across verticals through deeper customer engagements, strategic partnerships, business development, delivery operations, and governance. He is a resultoriented and accomplished professional, with significantly diversified experience ranging from managing business units to leading strategic customer programs across geographies. India's payment journey has changed significantly over time. What started as a barter system has evolved into cashless payments Migrating your data and services to a public cloud service like Google Cloud offers multiple advantages, including increased flexibility and agility.... Traditional banks are reinventing themselves to meet ----- Arcticle source ----- https://www.wipro.com/blogs/pallavi-thakur/ -----Contact Wipro Blogs By Author Please fill the required details to access the content Pallavi Thakur Pallavi Thakur Senior Manager, Blockchain Practice, Wipro Pallavi is a senior payments and blockchain expert with 14 years of experience. She is currently responsible for blockchain / DLT advisory and consulting for banking and financial services clients, globally. She specializes in blockchain applicability in financial use cases of digital currencies, cross border payments, digital identity / KYC, asset tokenization etc. She leads the charter for Digital Assets as part of the Blockchain www.wipro.com/blogs/nayan-r-gavaral/ ---- Contact Wipro Blogs By Author Speeding up your analytics journey with accelerated data ingestion Please fill the required details to access the content Nayan R Gavaral Nayan R Gavaral Practice Leader and Data Integration Architect -Data, Analytics and AI, Wipro Nayan has more than 17 years of experience in the areas of Data Integration, Data Warehousing, Data Architecture and BI. He works closely with client architects, project delivery, solution design and consulting teams to ensure the success of technical/data integrations as part of joint customer solutions. In his previous roles, he has been involved in various data management architecture and implementation engagements across geographies and industry domains for a variety of customers. It's all about speed (but a controlled one), as to how quickly we can make the jump from raw data to actionable insights in the digital age. This calls for access to the right data at right speed at the right time, in fact at all times to ensure there is continuous supply of source data coming into your analytics platform (onpremise and/or cloud) to prevent your actionable insights from going stale.

## Speeding up your analytics journey with accelerated data ingestion

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support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the source ---- https://www.wipro.com/blogs/emily-rust/ ---- Contact Wipro Blogs By Author Higher Ed and Cyber Security: Learning from the Blackbaud Breach Please fill the required details to access the content Emily Rust Emily Rust Global Director, Higher Education at Appirio Emily Rust is a Global Director at Appirio. She has over 12 years of experience in global Salesforce program design and delivery execution with a strong focus in higher education. She's a thought leader and an innovative thinker always pushing the boundaries finding new ways to enable teams and customers to go beyond expectations. As of July 30, 125 organizations claimed to have been affected by the Blackbaud security breach that occurred in May of this year. Of those groups, nearly half are schools or universities, highlighting a trend of increasingly complex ransomware attacks on learning institutions. To keep up and stay secure, schools need to modernize more strategically. ==============

#### Higher Ed and Cyber Security: Learning from the Blackbaud Breach

---- Arcticle source ---- https://www.wipro.com/blogs/emily-rust/higher-edand-cyber-security-learning-from-the-blackbaud-breach/ ---- About the Author Contact Wipro Please fill the required details to access the content Higher Ed and Cyber Security: Learning from the Blackbaud Breach September | 2020 As of July 30, 125 organizations claimed to have been affected by the Blackbaud security breach that occurred in May of this year. Of those groups, nearly half are schools or universities, highlighting a trend of increasingly complex ransomware attacks on learning institutions. To keep up and stay secure, schools need to modernize more strategically. Colleges and universities have long been prime targets for hackers because they deal with a lot of sensitive -- and therefore valuable -- information that ranges from personal health and financial records of students, staff, and alumni to research and development data. Schools also tend to have weaker or less mature security programs. Information may be stored on vulnerable legacy systems, transported across vast networks, and accessed by unmanaged student devices. Additionally, the pervasive use of on-campus Wi-Fi enables outsiders to connect and pose serious threats. Such an array of access points makes it difficult for schools to maintain secure digital perimeters. A transition to more technical and remote capabilities risks compounding that issue because such a transition means more access and, therefore, more access points for schools to secure and manage. Without sufficient strategy and oversight, even schools with some level of cybersecurity protection risk making themselves more vulnerable as they adapt because it's not guaranteed that existing security measures will still

be sufficient. Blackbaud is a cloud-computing services provider that supplies many of the schools affected by the breach with CRM (customer relationship management) tools, such as platforms and systems for alumni relations or interdepartmental communications. These services reflect an interest many schools have in modernizing to improve user-experience and support remote-friendly learning. They also represent extensions of existing security threats. Greater connectivity means more devices accessing schools' information from a wider variety of networks, including public or unsecure Wi-Fi. Even relying on a third party to facilitate these exchanges presents vulnerabilities. Hackers frequently target third-party vendors to gain access to the organizations those vendors support. And, due to strict regulations about the handling of student records and data, schools are expected to be responsible for any actions involving that data - even the actions of an external partner. What can learning institutions do to protect themselves? The answer lies in awareness and strategy. Schools need to better understand their third-party information supply chain and how to manage security throughout. This may sound like an obvious conclusion to draw, but ask yourself: What are the security policies and procedures of your thirdparty vendors? How do you know that your data is safe with them? What about the students and staff accessing your school's networks - how do you know they're following best practices? Some of the most common cybersecurity issues are perpetuated because organizations trust that the proper measures are in place rather than investigating and evaluating those measures themselves. This is especially true as schools modernize, because not everyone has the technical understanding to know whether a system is adequately secured and what impacts certain updates will have. Schools, like other organizations, need to develop strategies, policies, and procedures to ensure that their operations are as secure as they are efficient. Organization leaders need to audit the school's security architecture and create a blueprint for renovations. They must hire the talent and expertise needed to build and maintain those systems and acquire the tools to support that talent. And they must invest time and resources into educating all users on best practices to keep access points secure, ultimately establishing a trust-but-verify process to ensure all third-party access meets the institution's security requirements. Great. But how are schools -- especially those already struggling with cybersecurity -- expected to address all of these points? How much time do they have? How much will it all cost? Where do they even begin? Rather than getting overwhelmed by the long road ahead and cutting corners or avoiding the journey altogether, schools should think of cybersecurity as an ongoing effort and focus on taking careful, continuous steps forward. All along the way, there are resources and partners available to help. Wipro, for example, offers a comprehensive remote assessment to get universities started by identifying gaps in their security coverage, vulnerabilities in their systems, and potential threats. We then use this information to help universities align on a security development plan that accounts for their entire information supply chain. This strategic planning supports resilient cybersecurity programs that are tailored to the specific needs of an organization yet flexible enough to adapt to meet new demands. Wipro has also formed the Quarterly Cybersecurity Advisory Council, which meets to discuss developments and innovations in cybersecurity. By sharing ideas and experiences, the council hopes to raise awareness among organizations, including those in the higher education

sector, and help best practices for security become second nature. Change is constant and rapid in the digital world. To keep up and stay secure, schools need to be aware of where they stand and where they're headed. To start strategizing your development, contact us and ask about our remote security assessments. Then, check-in with our Quarterly Cybersecurity Advisory Council for updates on how to bring higher security to higher education. Emily Rust Global Director, Higher Education at Appirio Emily Rust is a Global Director at Appirio. She has over 12 years of experience in global Salesforce program design and delivery execution with a strong focus in higher education. She's a thought leader and an innovative thinker always pushing the boundaries finding new ways to enable teams and customers to source ---- https://www.wipro.com/blogs/madhusudan-kulkarni/ ---- Contact Wipro Blogs By Author Do Only Outcomes Shape a Leader? Please fill the required details to access the content Madhusudan Kulkarni Madhusudan Kulkarni General Manager and Head - Digital and Consulting Business (India), Wipro Madhusudan Kulkarni heads Digital and Consulting Business for Wipro in India. His multi-segment leadership across e-Commerce, Banking, Manufacturing, Telecom, Healthcare and Public Sector positions him uniquely in providing thought leadership to our customers. He brings with him a rich experience of running a successful start-up, business unit with P&L responsibilities, along with strong sales and marketing capabilities. He has written many articles around Digital Economy, Artificial Intelligence, and Financial Management Systems and has also contributed towards developing "India 2035" Vision document in collaboration with NITI Aayog for the Prime Minister's Office. In this world of stiff competition, we often tend to judge people by their performances. More so, in the corporate world where results matter more than anything else, one tends to draw a cyclical template on project outcomes, quarter-on-quarter results and transaction-based outputs in identifying the key performers.

#### Do Only Outcomes Shape a Leader?

---- Arcticle source ---- https://www.wipro.com/blogs/madhusudan-kulkarni/do-only-outcomes-shape-a-leader/ ---- About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Do Only Outcomes Shape a Leader? Performance vs Journey in Leadership Development September | 2020 In this world of stiff competition, we often tend to judge people by their performances. More so, in the corporate world where results matter more than anything else, one tends to draw a cyclical template on project outcomes, quarter-on-quarter results and transaction-based outputs in identifying the key performers. While there are external factors that also influence one's performance, the key differentiators are the individual's hard work and attitude to win against all odds. Someone who

has been a consistent performer, has her / his own cycle of learning, and will go through the experience on the road that is less travelled. The next question is "Does only performance guarantee the emergence of a new leader?" While some tend to agree to this, the real answer could be slightly broader than what we see. That is when "Potential" gets a space along with "Performance" and "Journey" along with "Outcomes". The journey to great outcomes Jonathan Edwards from Great Britain is an Olympic, World, Commonwealth and European champion and holds the world record for Triple Jump. We all remember his famous consecutive jumps where he crossed 18 meters for the first time and broke back-to-back records. However, not many would know that he stood at the 23rd place in the same event at Seoul Olympics in 1988, 35th place at Barcelona Olympics in 1992 and then a Silver medal at Atlanta Olympics in 1996. Jonathan finally won the Gold medal at Sydney Olympics in 2000. His journey would have started much before the 1988 Seoul Olympics. Rahul Dravid, an Indian cricketer, once said, "I batted 604 times for India, didn't cross 50 runs 410 times out of those innings. I failed a lot more times than I succeeded". When you look back at his cricketing career, he played 164 Tests and 344 ODI matches in international cricket by amassing 24K international runs and was adjudged as the most dependable batsman that India has ever produced. The above two sporting examples give you enough indication that the ultimate performance is not a one off incident but a sustained effort and journey to get to the final destination. A sustained approach to leadership development Leadership development in a corporate world is no different. It is a continuous process of coaching and mentoring across aspects of business relevance. While it is a given that one should have the know-how of the domain they are working in and the financial aspects of profit and loss, but the finer elements of leadership is something that have to be developed and nurtured on a continuous basis. Effective communication, stakeholder management, interpersonal skills, collaborative working, conflict resolution and trustworthiness are some of the critical traits in any leadership developmental process. In an environment of great diversity, one has to observe experience and learn the nuances of leadership qualities over a sustained period of time. Recognizing the power of potential A great leader or a coach is someone who can build a team, not just based on an individual's past performances but also on the qualities and the potential that one brings to the team. The leader should have the ability to always look forward with intermittent course corrections and transparent feedback mechanisms. The culture that is built in the team goes a long way in defining the path to achieve a common goal set for the business and the team. Industry: Madhusudan Kulkarni General Manager and Head - Digital and Consulting Business (India), Wipro Madhusudan Kulkarni heads Digital and Consulting Business for Wipro in India. His multi-segment leadership across e-Commerce, Banking, Manufacturing, Telecom, Healthcare and Public Sector positions him uniquely in providing thought leadership to our customers. He brings with him a rich experience of running a successful start-up, business unit with P&L responsibilities, along with strong sales and marketing capabilities. He has written many articles around Digital Economy, Artificial Intelligence, and Financial Management Systems and has also contributed towards developing "India 2035" Vision document in collaboration with NITI Aavog for the Prime Minister's Office. Enterprise Mobility Management (EMM) involves the process management and IT

services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

==============================----- Arcticle source ----- https:// www.wipro.com/blogs/sridhar-akshanthula/ ----- Contact Wipro Blogs By Author 10 Best Practices to Improve Remote Hiring and Recruit Right Talent in the COVID-19 Times and Beyond Please fill the required details to access the content Sridhar Akshanthula Sridhar Akshanthula Head - Transformation, Talent Acquisition, Wipro Sridhar heads transformation initiatives at Talent acquisition where the focus is on onboarding new ways of working, tools, and automation. Sridhar brings his long delivery experience into reimagining strategies that help shape new age recruitment. Sridhar is a Wipro veteran, having spent 15 years in several key roles across the world in delivery and customer facing engagements. With COVID-19 crisis hitting the globe and the attendant social distancing norms that are being followed, recruitment is turning into a non-contact activity. Organizations are looking at remote recruiting mechanisms.

# 10 Best Practices to Improve Remote Hiring and Recruit Right Talent in the COVID-19 Times and Beyond

----- Arcticle source ----- https://www.wipro.com/blogs/sridhar-akshanthula/10best-practices-to-improve-remote-hiring-and-recruit-right-talent-in-thecovid-19-times-and-beyond/ ---- About the author Contact Wipro Related Blogs AI Helps Insurance Companies Make Smarter Decisions Why Digital Transformation Is All About People How to overcome the common barriers to Automation: 3 Emerging Trends Please fill the required details to access the content 10 Best Practices to Improve Remote Hiring and Recruit Right Talent in the COVID-19 Times and Beyond September | 2020 With COVID-19 crisis hitting the globe and the attendant social distancing norms that are being followed, recruitment is turning into a non-contact activity. Organizations are looking at remote recruiting mechanisms. Remote or noncontact recruiting in the virtual space could be cost-effective as it avoids travel, but it does pose some serious questions with regard to the mechanism to evaluate the right candidate and drive malpractice-free recruitment. It is important to ensure that the evaluation process offers adequate confidence to the recruiter / technical panelists regarding the technical skills of the candidate. This could involve evaluating the coding competence of the candidate using appropriate coding assessments. The recruiter / technical panel has to also ensure that the candidate is not

resorting to any malpractice during the interview process. We have drawn up some guidelines for panelists who conduct remote evaluation to help in identifying the right candidate. While these checks are required to prevent malpractices, they should in no way give the candidate a feeling that he/she is being subjected to unnecessary checks / snooping. The recruiter / panelist should follow the above guidelines in a very non-intrusive manner and make sure that the candidate feels at ease. The recruiter should ensure the overall interview experience stays positive. Recruiting in the new normal While remote recruiting brings its own challenges - it has given rise to multiple benefits that make remote recruiting a phenomenon that will stay on. Some of the key benefits that remote recruiting has brought in include: Hiring in the COVID times will follow the guidelines discussed as well as leverage tools that help in preventing malpractices. These guidelines and tools could continue beyond and become a part of the recruitment world. Industry: Sridhar Akshanthula Head - Transformation, Talent Acquisition, Wipro Sridhar heads transformation initiatives at Talent acquisition where the focus is on onboarding new ways of working, tools, and automation. Sridhar brings his long delivery experience into reimagining strategies that help shape new age recruitment. Sridhar is a Wipro veteran, having spent 15 years in several key roles across the world in delivery and customer facing engagements. Financial Services is one of the most challenging industries from a technology standpoint. Digital business transformation is now critical to the survival of virtually every organization, but effective change management must center on people. Successfully implementing automation systems might never be "easy," but platforms and solutions have emerged to make it as frictionless as possible.

www.wipro.com/blogs/murthy-malapaka/ ---- Contact Wipro Blogs By Author How to make infrastructure invisible through operational design How to develop resilient IT operations for the COVID-19 era Please fill the required details to access the content Murthy Malapaka Murthy Malapaka CTO, Cloud and Infrastructure Services, North America, Wipro Ltd. Murthy Malapaka is CTO of cloud and infrastructure services, North America, at Wipro Ltd. Malapaka has nearly three decades of experience in the technology space and has held various technology leadership positions across application and infrastructure architecture domains, specializing in service availability and reliability. In his current role, Malapaka helps enterprises digitally rearchitect their operations to run on multi-cloud IT environments. IT infrastructure broadly represents the 'foundational' elements that are constructed to build an IT service, which includes the hardware components of compute, network, storage, and the software components such as application platforms distributed in a multi-tiered model. To meet pandemic-based business demands, enterprises can take these five steps to transform their existing technology platforms. Wipro exec Murthy Malapaka explains the process. ================

### How to develop resilient IT operations for the COVID-19 era

----- Arcticle source ----- https://www.wipro.com/blogs/murthy-malapaka/howto-develop-resilient-it-operations-for-the-covid-19-era/ ---- About the author Contact Wipro Related Blogs Optimizing Field services Through AR Transforming the leave-of-absence experience into an employee-retention tool A Smarter Way to Collaborate and Build Applications with Azure DevOps Please fill the required details to access the content How to develop resilient IT operations for the COVID-19 era October | 2020 To meet pandemic-based business demands, enterprises can take these five steps to transform their existing technology platforms. Wipro exec Murthy Malapaka explains the process. The significant impact of COVID-19 has driven enterprises to embark on an unprecedented transformation journey. The pandemic has also resulted in a substantial shift in employees working from home, a model that was previously unorthodox for most companies. During this transition, organizations have had to reconfigure the operation processes, technology foundation and employee trainings -- rolling it all out immediately, leaving much to be desired in terms of quality, efficacy and reliability. One key reason for continued inefficiency is that underlying technology platforms, while reconfigured for the pandemic's demands, remain the same. To embrace the pandemic's business environment and meet the demands of IT budget cuts, CIOs and chief experience officers must consider transforming their existing technology platforms. The following overview offers insight into how organizations can undertake such a transformation to achieve resilient IT operations. Step 1: Make infrastructure 'invisible' Applications enable business. Consequently, businesses must make a conscious effort to render IT infrastructure "invisible." Invisible infrastructure refers to the practice of designing IT operation architecture based on application and business services, rather than focusing on tower-based models like server, network and storage. Traditionally, infrastructure is architected in towers such as a data center, end-user computing, service desk and so forth. Each of these is wrapped in numerous metrics -- such as mean time to repair, mean time between failures, first-call resolution and average handle time -- that are often myopic at best. These metrics alone do not serve any useful purpose unless they are viewed within the context of business metrics or KPIs -- for example, number of orders, invoices or fulfillment failures. Organizations can connect these business metrics to underlying technology or tower service metrics to build new operational models, which a digital operations dashboard can show in real time. The dashboard can also identify anomalies. These infrastructure metrics need to be made invisible and aggregated to serve a higher cause, so they are more understandable by the business organization. Step 2: Consolidate operations into a single platform The next step is to consolidate operations into one platform that drives the service lifecycle, enabling composability of services. Global IT spending forecast at a glance Whether it is new software development, bug fixes or enhancements provided by various application support teams or vendors, these offerings are typically

set up as standalone services on a separate set of platforms. They need to be tightly integrated with the existing IT service management platforms, however, with all collaboration platforms around operational support integrated into a unified service management platform. Additionally, there needs to be a "single operating model" or a run platform that enables a digital command center, which should show the enterprise health across any service at any given point of time. This is not a single pane of glass or unified console that is built on aggregation, but instead a true representation of integrated service state. Step 3: Extend and integrate the single operating model The next step is to prepare that single operating model through extensions and integrations, while also enhancing capabilities of the existing technology platform. To determine the current state of integration of services start with a simple evaluation of the following: This simple evaluation helps determine how far an organization is with respect to true integration. Once the evaluation is completed, look at the possibilities of integration through platforms in the present environment and consider extending them for the purpose of integrating them. Recent developments in technology platforms, many sparked by acquisitions, demonstrate how they are driving tight integration of application services with invisible infrastructure services using infrastructure as code; scripting languages that allow self-service mechanisms to define and provision data center infrastructure; and a PaaS-based approach accompanied by software provisioning, configuration management and application-deployment tools. One notable example of this was VMware's acquisition of Pivotal in January 2020. Pivotal offers PaaS that can show the platform metrics in operations rather than tower-based metrics. Supported by Terraform and Ansible, the technology platform can make infrastructure invisible through scripts and automation. Step 4: Reskill engineering talent to benefit from platforms This kind of tightly integrated technology platform will provide opportunities to deploy personnel with full-stack engineering skills. Such technicians need to have end-to-end software development skills and expertise in infrastructure as code. In addition, these emerging technology platforms will let organizations take advantage of site-reliability engineering design principles. Build this technology platform as a pure private cloud, a pure public environment using the respective platform-provided native tools or using a hybrid model. Step 5: Move operations management from fault to anomaly When it comes to application operations, every possible tool and platform has announced support of AI and machine learning to enable realtime streaming analytics. This allows application behaviors to be learned and built-in real-time predictive analytics to enable predictive management. This is a critical time for IT operations to make a fundamental shift in mindset from fault to anomaly. If we start moving from incidents to situations enabled by anomaly detection, a new-age digital operation command center will evolve to support the following: In conclusion, there is a lot of possibility and potential inherent in the platforms and technology investments that organizations have already made. They can be realized through a set of transformations. Doing so will allow organizations to build and utilize a resilient IT operations platform now, which can enable true consolidation and cater to unprecedented demands. Industry: Murthy Malapaka CTO, Cloud and Infrastructure Services, North America, Wipro Ltd. Murthy Malapaka is CTO of cloud and infrastructure services, North America, at Wipro Ltd. Malapaka has nearly three decades of experience in

the technology space and has held various technology leadership positions across application and infrastructure architecture domains, specializing in service availability and reliability. In his current role, Malapaka helps enterprises digitally rearchitect their operations to run on multi-cloud IT environments. In the evolving landscape of digital workplaces, efficient field service operations are critical in ensuring reduced downtime... appy employees usually stay at their jobs, frustrated workers often don't. Chief human resource officers (CHROs) tell us that the corporate leave of absence (LOA) process is one of the most common sources of employee frustration. Employees often rank their LOA experiences low on the satisfaction scale, using descriptors such as complicated, confusing, inconsistent, time consuming, and unresolved. In a world where business is evolving at the speed of thought, rapidly changing market conditions pose several challenges for enterprises across industries.

## How to make infrastructure invisible through operational design

---- Arcticle source ---- https://www.wipro.com/blogs/murthy-malapaka/howto-make-infrastructure-invisible-through-operational-design/ ---- About the author Contact Wipro Related Blogs Optimizing Field services Through AR Transforming the leave-of-absence experience into an employee-retention tool A Smarter Way to Collaborate and Build Applications with Azure DevOps Please fill the required details to access the content How to make infrastructure invisible through operational design November | 2020 IT infrastructure broadly represents the 'foundational' elements that are constructed to build an IT service, which includes the hardware components of compute, network, storage, and the software components such as application platforms distributed in a multi-tiered model. While IT infrastructure has been deemed as invisible, over the last few decades of the IT operations evolution, there is a specific effort put around making infrastructure more visible. The reason for that is hidden in the kind of IT services that this infrastructure was used to build. In the mainframe era and the client-server era, during which ITIL emerged while web 1.0 was taking shape, the need to ascertain the 'health' of the infrastructure components became critical. Hence operating systems like Unix and Microsoft Windows introduced performance monitors with event generation capabilities and monitoring tools and platforms like HP, BMC and CA. They could use those events and correlate them with the intelligence they had gained from the so called 'service management' platforms and their 'configuration management database CMDB and configuration items CI'. As the evolution continued, data centers evolved, large facilities were getting built and the infrastructure landscape started exploding as the web 2.0 adoption started with access from anywhere, dynamic content and commerce and collaboration. The IT operational data started exploding and controls of what must be monitored 'at minimum' or what kind of suppression techniques

needed to be applied in the operational design. The current IT operation design has thus become reactive due to its dependency on infrastructure monitoring. The ITIL processes are supporting that reactive design. Monitoring is done using alerts and thresholds, events are created and correlated using static CI data from CMDB. This has become a template based on which support staff and their skills are developed. In the last decade, this foundation or IT infrastructure itself changed. It became dynamic with the advent of load balancers across all tiers of application fabric, public and private cloud, hyper converged and software defined infrastructure, including compute, storage and network (LAN and WAN) and more recently the containerization evolution. A dynamic foundation that is designed for change cannot be monitored and managed by a static designbased methodology. This is where the need for making infrastructure invisible is arising. To make infrastructure invisible, the first step is to move the monitoring to where the impact is first seen (effect) and in this case, the IT Services. This can be started in a simple way where an approach like monitoring the front-end, middleware, message bus, and database should become the source of events and correlation. A more complex but effective monitoring could be if we can relate to a business metric or KPI level, such as number of sales orders, invoices, orders fulfilled and so on. When we make infrastructure invisible, it would enable operations to catch an incident happening in the application or business service. This can then be fine-tuned over a period of time by changing the KPI thresholds. This incident data can also become a rich source of mining to build prediction models. One of the best and simple ways to monitor upstream environment is to set up synthetic transaction monitoring and set up events for performance metrics of those synthetics. These performance metrics, when used for event generation and correlation with the underlying factors, can help catch an event early on and predict failures. This would mean that we need to adopt or learn to change our existing support workflows, known as operational method and corresponding support teams and their skills, which we call the operational model. Such method and model will represent and support 'services' and not 'towers' starting with service desk which would be business process aligned. The entire back end operations supporting such a service desk will be realigned accordingly. Thus, when the operational teams and processes are designed around the events that are generated and correlated at a 'service level', then the infrastructure events will become invisible and only become visible in the root cause identification process leading to an invisible infrastructure led IT operations. Industry: Murthy Malapaka CTO, Cloud and Infrastructure Services, North America, Wipro Ltd. Murthy Malapaka is CTO of cloud and infrastructure services, North America, at Wipro Ltd. Malapaka has nearly three decades of experience in the technology space and has held various technology leadership positions across application and infrastructure architecture domains, specializing in service availability and reliability. In his current role, Malapaka helps enterprises digitally rearchitect their operations to run on multi-cloud IT environments. In the evolving landscape of digital workplaces, efficient field service operations are critical in ensuring reduced downtime... appy employees usually stay at their jobs, frustrated workers often don't. Chief human resource officers (CHROs) tell us that the corporate leave of absence (LOA) process is one of the most common sources of employee frustration. Employees often rank their LOA

experiences low on the satisfaction scale, using descriptors such as complicated, confusing, inconsistent, time consuming, and unresolved. In a world where business is evolving at the speed of thought, rapidly changing market conditions pose several challenges for enterprises across industries. www.wipro.com/blogs/silvia-cambie/ ---- Contact Wipro Blogs By Author The time is now: How artificial intelligence and 'liberated data' can help the Energy industry weather the current crisis Please fill the required details to access the content Silvia Cambie Silvia Cambie Transformation Director, Wipro ENR Silvia has more than 15 years of experience in emerging tech, Cloud, AI and machine learning. In Wipro, she leads digital transformation projects focusing on the energy sector. In her work with IBM Watson prior to joining Wipro, she learned the power of applying creativity to the way we train machines; the world's AI journey is in its early days and keeping an open mind counts most. Silvia has also consulted for financial services and telco. Silvia speaks five languages and frequently keynotes international conferences. For the past thirteen years, she has been writing a blog on tech and its impact on the workplace. Once, the Energy industry was widely seen 

# The time is now: How artificial intelligence and 'liberated data' can help the Energy industry weather the current crisis

----- Arcticle source ----- https://www.wipro.com/blogs/silvia-cambie/the-timeis-now-how-artificial-intelligence-and-liberated-data-can-help-the-energyindustry-weather-the-current-crisis/ ---- About the author Contact Wipro Related Blogs Advanced Analytics Improve Industrial Plants' Asset Performance and Efficiency Looking into the Future of the Classic Data Historian Please fill the required details to access the content The time is now: How artificial intelligence and 'liberated data' can help the Energy industry weather the current crisis October | 2020 Once, the Energy industry was widely seen as a laggard in embracing AI. No more. The global pandemic and oil price instability have created intense pressure to cut costs, improve Opex, drive efficiencies, and generate more value. Along with that urgency has come a growing recognition that AI is the technology bestsuited to help Energy weather the current crisis, revitalize its operating models, and transform for what lies ahead. Subsurface data, like seismic data and well logs, are all potentially rich sources for Machine Learning. However according to estimates, only 10% of subsurface data is currently being used. Initiatives like the OSDU are aimed at increasing this number considerably, by liberating data from applications and collecting it in a different way. The core principle of the OSDU is to 'free' data from applications; enabling new cloud-native data-driven apps. But clearly, there is a longer journey ahead. The industry's ultimate goal must be to formulate a data strategy that harnesses AI to learn from that data — whether it's

neatly structured in rows and columns or completely unstructured — and gain insight. (What's unstructured data? Examples would include exploration photos included in a presentation or sent to a colleague in an email, or images collected from drone fly-bys.) Why AI for the Energy Sector? Unlike conventional computers, artificial intelligence is not programmed. On the one hand, like humans, AI learns from information. Yet on the other, it learns far faster than humanly possible. Machine learning (ML) enables AI to make a correlation between a pattern and an outcome, formulate a hypothesis, take action and then integrate that feedback into its next hypothesis. AI continuously learns, with the goal of predicting future outcomes and events with greater accuracy. Here are some specific applications every Energy company ought to consider. Using predictive analytics to drive down maintenance costs Detecting pipeline cracks and defects at the earliest possible stage can help shrink maintenance costs. Energy companies can leverage AI to anticipate when maintenance of a pipeline is needed or a pump is likely to malfunction. An AI app would begin by 'viewing' thousands of images and videos of pipes. By analysing damage and estimating the degree and probability of fatality, the AI can learn to identify tell-tale signs that predict upcoming failures. An energy company can use drones to monitor its pipelines, and feed real-time images to the app. By combining these photos and videos with GPS, weather and environmental data, the company can identify damages and defects at an early stage with a high degree of certainty. Such real time data and real time monitoring builds a robust database. The more data AI studies and learns from, the more it can continuously improve its predictive capabilities. Cognitive assistants and smart expertise locators for a smaller workforce The continuous aging of the Energy sector workforce has resulted in a loss of core expertise and organisational memory, and has stifled innovation. Slashing overheads in the current crisis is going to painfully exacerbate this trend. Cognitive assistants and smart expertise locators can help significantly. Through ML (machine learning) a company can capture the expertise of a shrinking labour force, combine it with knowledge datasets and real-time data (e.g. data from connected devices tracking the moves of workers on oil rigs) and use it to train chatbots. In the field, a worker with an AI-powered wearable assistant can say 'wake words' like "I need help" or "I can't figure this out" and get instant support. This might mean providing step-by-step instructions in video or augmented reality. Or, it might connect the worker with a remote expert somewhere else in the world who can provide direct coaching and guidance. Avoiding hazardous situations using Image recognition The Energy sector must now manage facilities that are either somewhat or completely unattended due to staff cuts or Covid-19 containment measures. Proven technologies, like facial recognition and gesture detection, can help spot behaviours that might create a hazard, like workers showing signs of drowsiness during their shift or moving too close to a dangerous area. When combined with connected worker technology like smart garments with data-collecting sensors, image recognition can power real-time monitoring dashboards and automation that spot signs of danger before it's too late. The result is safer employees, avoidance of preventable (and costly) accidents, and increased uptime. The time for the Energy industry to accelerate its AI journey is now. The challenges for the industry have never been greater, but its increased interest in AI comes at an ideal moment. A large number of critical applications have already been

developed and battle-tested under real field conditions. They are ready to be applied. With the right partners, the Energy sector can emerge from this crisis stronger and ready for the future. The time to start the journey is now. AI (Artificial Intelligence) and Machine Learning (ML) glossary Industry: Silvia Cambie Transformation Director, Wipro ENR Silvia has more than 15 years of experience in emerging tech, Cloud, AI and machine learning. In Wipro, she leads digital transformation projects focusing on the energy sector. In her work with IBM Watson prior to joining Wipro, she learned the power of applying creativity to the way we train machines; the world's AI journey is in its early days and keeping an open mind counts most. Silvia has also consulted for financial services and telco. Silvia speaks five languages and frequently keynotes international conferences. For the past thirteen years, she has been writing a blog on tech and its impact on the workplace. The chemical and oil and gas industries are facing financial, operational and market challenges due to uncertain global conditions. Some factors affecting profitability are unplanned downtime of critical assets, optimized asset performance and process efficiency improvement. The incredible velocity of the world's industrial output has inspired ongoing advancements in source ----- https://www.wipro.com/blogs/girish-datar/ ----- Contact Wipro Blogs By Author Robust or Resilient? Please fill the required details to access the content Girish Datar Girish Datar Director, Engineering Consulting, Industry 4.0 in the Industrial and Engineering Services, Wipro Girish Datar is Director, Engineering Consulting, Industry 4.0 in the Industrial and Engineering Services in Wipro. He has been with Wipro for about 6 years starting with smart manufacturing practice. He is a seasoned manufacturing professional with 20 years of global experience with Fortune 500 companies such as ABB, AlliedSignal, Flextronics. He brings a unique blend of manufacturing physics, transformational change process and right sizing of digital technologies to democratize digital and accelerate business impact. He is certified CPIM, PMP, Six Sigma BB, and Harada system for transformational change. How to Navigate Uncertainty and the New Normal 

#### **Robust or Resilient?**

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guaranteeing an accident will not happen on day 298? This is the essence of the robustness mindset: system preparedness for any kind of disruption or non-compliance in the future. Since the pandemic, words like robustness, resiliency, and agility have become more common in crisis management programs, while their definitions have become less clear. These terms are not interchangeable, but they aren't mutually exclusive either. Below, we define each concept and show how the end goal of robustness is reinforced by resiliency and agility. Robustness Robustness refers to strength and effectiveness, even in adverse conditions. The more robust a product is, the less its performance is affected by disruptions or input changes, because such changes have been predicted and contingency plans have been developed and built into the product. Obviously type and magnitude of disruptions will vary, but the guiding philosophy remains the same. Developers and designers build robustness into products and processes proactively, to ensure continuous improvement of performance from the very beginning. The table below shows industry examples of robustness, and the corresponding performance effects. Companies are increasingly vulnerable to high-impact and low-probability events. The problem is that many companies leave critical risk-management and business-continuity functions to staff and only check in periodically. Without a rigorous process to continuously monitor for threats, staff end up constantly fighting fires which can flare up anywhere throughout the system - rather than preventing them. Proactive risk mitigation requires a culture of trust, as well as structure, insight, and collaboration throughout the entire organization. Such an approach embodies robustness because it emphasizes continuous learning and improvement to better prepare the organization for future events. The pandemic has emphasized the value of robustness. Some countries responded better or faster than others. Those that had recently experienced an outbreak, for example, quickly adopted safety measures like wearing masks, using non-contract greetings, and practicing social distancing, which helped them manage the spread of the virus. Although responses weren't perfect (the pandemic still spread), these areas were better prepared to handle the health crisis because they used their experience addressing past events to build stronger incident responses for the future. It would be unwise to think that events like current pandemic or impending climate change are black swans. They are not! Resiliency Resilience is the ability to bounce back after disruption. Unlike robustness, which is proactive, resilience is reactive, following incidents in which system performance has already been affected. Resiliency is measured in terms of the time a system takes to recover to its original state of performance or better. A sustained or substantial impact, however, can prevent a system from returning to its original state. Consider the reaction column of a control plan. This column documents practices like alert maintenance and part segregation, but root-cause analysis is not performed until later, through gemba sessions, often resulting in stagnant monthly yields. With resilient operations, an organization reduces the time needed to resolve nonconformances in system so it can bounce back faster. But the impacts of the pandemic have been both significant and sustained. Business performance has plummeted for months due to the lockdowns. Whether it can return to original levels remains uncertain. Organizations with robust systems may have a better chance of recovery because the impacts they sustained were likely less significant. Agility Agility is the ability to adapt and implement

changes guickly. These changes are often driven by external factors (regulations, customers, technology, mergers and acquisitions) or internal ones (initiatives to innovate, drive new products and services, gain competitive advantage). An enterprise's agility needs to be balanced so that the system is stable enough to accommodate changes, otherwise it risks creating unnecessary waste, variation, or stressors in system. In the case of pandemic response, agile organizations likely incorporated new safety measures or ways of working faster than less agile companies, making them more likely to bounce back from disruptions - more resilient. To adequately prepare for the future, business leaders need strong and balanced approaches, which means prioritizing robustness. Robust systems are resilient systems, but not the other way around. Agility is an essential element of robustness, and should be built into every system so the organization can quickly orchestrate any necessary changes. As an example, knowing the risks of pandemic-type events, companies should have been easily able to deploy remote working arrangements for their employees. Business leaders can also make digital transformations more sustainable and scalable by promoting a robust mindset in the workforce. Hands-on domain experience, a solid understanding of change-management practices, and digital expertise will bridge the large gap between business and technology. Practical strategies that simplify, clarify, and help people focus towards reaching the vision is the need of the hour. Industry: Girish Datar Director, Engineering Consulting, Industry 4.0 in the Industrial and Engineering Services, Wipro Girish Datar is Director, Engineering Consulting, Industry 4.0 in the Industrial and Engineering Services in Wipro. He has been with Wipro for about 6 years starting with smart manufacturing practice. He is a seasoned manufacturing professional with 20 years of global experience with Fortune 500 companies such as ABB, AlliedSignal, Flextronics. He brings a unique blend of manufacturing physics. transformational change process and right sizing of digital technologies to democratize digital and accelerate business impact. He is certified CPIM, PMP, Six Sigma BB, and Harada system for transformational change. The consumer packaged goods (CPG) industry was badly affected by the pandemic, much like several other industries. Organizations in this industry therefore relied on retail In 2020, the pandemic rattled global supply chains As the retail sector continues to adapt and evolve to a post-pandemic https://www.wipro.com/blogs/lalit-kumar-pokharana/ ---- Contact Wipro Blogs By Author Looking into the Future of the Classic Data Historian Please fill the required details to access the content Lalit Kumar Pokharana Lalit Kumar Pokharana Principal Domain Consultant, Wipro Lalit Kumar Pokharana is a principal domain consultant at Wipro and is based in Houston, TX. He has over 13 years of experience in industrial manufacturing, automation, and control, and he specializes in consulting with technical expertise in control systems (PLC, DCS, SCADA), data historians, manufacturing execution systems (MES), and IoT sensors. Recently, he has been providing consultation for Real-Time Data Management, alarm management applications, SCADA, DCS systems, and OSIsoft. He also focuses on developing architectural best practices and working with customers on how they use real-time operational data platforms to transform their business, bridging the gap between operational technology and information technology. The incredible velocity of the

#### Looking into the Future of the Classic Data Historian

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capable of integration, archiving, asset modeling, notifications, visualizing, analysis, and many other analyzing features. Data historian, MES, and ERP all might become part of a DataLake (where everything is stored), which we can call the unified namespace. However, a DataLake will still not be able to supply data at the right time and with the right context for time-stamped process data with proper data integrity. The future of data historians encompasses much more than a traditional operational data historian -- data historian capabilities are just a sub-function. A more apt name for a system like this would be an "Industrial Data Management System" or something similar. Operational data historians are expensive, challenging to work with, and typically outdated with limited analysis and visualization capabilities. Additionally, not all data historians are horizontally scalable, and the system faces a performance penalty during large archived data retrievals. It is also very difficult to contextualize sensor data with other metadata for data historians, which is very lengthy and costly for customers to work with. An operational data historian provides the benefit of interfacing with data collection points with buffer capability (store and forward), as well as industrial system compatibility such as DCS, SCADA, and OPC. The future of the Industrial Data Management System relies on these key technologies: Finally, Industrial Data Management Systems need to have a solution for solving human talent availability issues in order to help customers. As of today, there are multiple players in this race, but no one has a complete solution for the future of the Industrial Data Management System yet. Major time series data management market players in 2020 include these organizations: References Lalit Kumar Pokharana Principal Domain Consultant, Wipro Lalit Kumar Pokharana is a principal domain consultant at Wipro and is based in Houston, TX. He has over 13 years of experience in industrial manufacturing, automation, and control, and he specializes in consulting with technical expertise in control systems (PLC, DCS, SCADA), data historians, manufacturing execution systems (MES), and IoT sensors. Recently, he has been providing consultation for Real-Time Data Management, alarm management applications, SCADA, DCS systems, and OSIsoft. He also focuses on developing architectural best practices and working with customers on how they use real-time operational data platforms to transform their business, bridging the gap between operational ----- Arcticle source ----- https://www.wipro.com/blogs/bharat-bathi/ -----Contact Wipro Blogs By Author 4 Ways Super Funds Can Elevate Member Experience Please fill the required details to access the content Bharat Bathi Bharat Bathi Wealth - Solution & Practice, Wipro HR Services, Digital Operations and Platform, Wipro Limited Bharat Bathi leads the Retirement Services practice as part of the go-to market solutions for Wipro HR Services. He has more than 14 years of profound experience in 401(k), 403(b), 457, NQ, and superannuation process design and transformation. His expertise is expansive, including optimizing retirement outcomes to designing customized investment profiles and everything in between. Backed by a team of internal wealth management experts, he frequently advises external fund members and trustees on how to increase members' returns without diluting the importance of true and effective governance. Email ID.: bharat.bathi@wipro.com Despite the long-standing history of private pension plans, superannuation was introduced to Australians over 20 years ago to help them support their retirement in a financially viable way.

#### 4 Ways Super Funds Can Elevate Member Experience

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use of AI and automation has effectively lowered the "labor costs" associated with superfund management. And these lower fund management fees are what seem to have triggered better member retention rates. 2. It's all about saving money, and robotics can help! This is important: The Productivity Commission has advised Australians that if they pay more than 1.5% of their total super balance in fees, they are probably being hit by the 'fees-for-no-service' exploit. For funds, reducing administrative costs (currently pegged at 40% of the total fee) and properly redistributing them should be immediate action items. An experience that pivots on greater transparency and the full disclosure of account-related fees has become the new litmus test for members. Financial advice powered by robotic capabilities is the next service that's piquing member interest. According to the ASIC Regulatory Guide, robo-advisors are becoming the preferred choice for many funds to provide low-cost, single-issue advice. Super funds are adopting RPA-powered tools to monitor super accounts, access research reports, and help members make better financial transactions. For example, a leading superfund recently digitalized the eight most common transactions used by advisers and investment managers to create risk portfolios. A text message is sent to the member whenever the advisor interacts with his or her super account, allowing him or her to configure account settings and authorize advised changes. It's important to remember that members may lack the time or expertise to manage their investments. However, continuous innovation enables startups or super-admins to understand different usage patterns and suggest customized investment plans to members. Super funds that plan to leverage new technologies and innovate are likely to provide better member experiences. 3. Don't be socially marooned. Social media continues to be the top choice of members for engaging with their super funds. According to a recent IQ survey, 90% of members engage with their funds via Facebook, and 84% turn to Twitter to manage their funds. Social sites like YouTube and Instagram have also made it clear that video is still one the best mediums to foster Australians' interest. This provides important context for online interactions that will engage members effectively. From website navigation to page consistency and device compatibility, super funds are judged on all parameters. It's almost imperative for super funds to ensure their social media handles provide relevant and helpful information to the members. This includes having a full-fledged LinkedIn page dedicated to the whereabouts of members' superfunds. (Note: More than 96% of super funds in Australia have a company LinkedIn page, which adds to their visibility across the web and helps them engage with their members easily.) 4. Don't let your members succumb to cyber-crime click-bait. The Australian Prudential Regulation Authority (APRA)'s Cyber Security Survey revealed that the superannuation industry faced material cyber incidents with increased sophistication and frequency. Nearly 75% of respondents reported that they needed escalation to executive management. Four years since then, super funds in Australia are still highly susceptible to cyber fraud. Large money pools, compromised process infrastructure, and low member engagement are among the top reasons why the industry exhibits vulnerability to cyber-crimes. To combat cyber scams, super funds need to invest in augmenting their predictive and prescriptive analytics capabilities to detect known and unknown events that could lead to suspicious behavior. In the case of a cyber-fraud event, super funds should immediately freeze the potentially compromised account. Funds should guide members on

reporting these fake billing scams to The Australian Competition and Consumer Commission's Scamwatch or other legal bodies. Improving overall security will go a long way in keeping members happy and enhancing the overall experience they expect from their super fund. Closing Thoughts A member's journey consists of multiple experiential touchpoints. From apps to smartphones and social media channels, members expect their funds to understand their varying requirements and deliver an optimized experience. Now, the onus is on super funds. The digital capabilities of these fund are directly proportional to member expectations. Ultimately, funds should not hesitate to improve their digital architecture, knowing it will foster positive member experiences in the future. Industry: Bharat Bathi Wealth - Solution & Practice, Wipro HR Services, Digital Operations and Platform, Wipro Limited Bharat Bathi leads the Retirement Services practice as part of the go-to market solutions for Wipro HR Services. He has more than 14 years of profound experience in 401(k), 403(b), 457, NQ, and superannuation process design and transformation. His expertise is expansive, including optimizing retirement outcomes to designing customized investment profiles and everything in between. Backed by a team of internal wealth management experts, he frequently advises external fund members and trustees on how to increase members' returns without diluting the importance of true and effective governance. Email ID.: bharat.bathi@wipro.com While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just neglected culture. Content is King. Never has this been truer than https://www.wipro.com/blogs/Abhijith-S-Rao/ ---- Contact Wipro Blogs By Author Leveraging the subscription economy during the pandemic Please fill the required details to access the content Abhijith S. Rao Abhijith S. Rao Lead Solution Architect - Zuora Practice, Wipro Limited Abhijith is a Zuora Certified Architect from Zuora University. He has helped implement Zuora for more than 40 subscription model projects in automobile, healthcare, software & IT, and real estate sectors. Abhijith current works as the lead Solution Architect for subscription model & economy for the Zuora Practice in Wipro With the COVID-19 pandemic, our lives are increasingly evolving towards digital services or combined products of such services. Consumers are looking for feasible ways to opt for flexible and scalable bundled product 

### Leveraging the subscription economy during the pandemic

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the content Leveraging the subscription economy during the pandemic October | 2020 With the COVID-19 pandemic, our lives are increasingly evolving towards digital services or combined products of such services. Consumers are looking for feasible ways to opt for flexible and scalable bundled product offerings. Consumers should have the right to choose where, how and how much they consume and pay for the same. This is creating a shift toward subscription business models across every industry. With the huge impact of COVID-19 on global businesses and the global economy, this shift will accelerate the flexibility of requirements. Subscriptions will be the easy approach to streamline business operations and maintain the 'order to quote to cash' process flow. The growth rate for subscription in digital news and media grew by 110% in March to May, 2020 compared to the previous 12 months, as a result of increased consumer interest in news updates. How to Drive Subscriptions Pricing is one of the most valuable tools in the subscription economy and must align with your consumer needs and values. As a subscription service provider, we need to understand subscribers' habits by building the first basic model of pricing and segment that offers services or products. The next step will be iterating these subscription services eventually over time. Another important point where we can provide better services to subscribers will be upsell or cross sell the product offers during surges in demand. As a subscription provider, we need to understand the consumer habits in terms of payment and its frequency. This is where customer segmentation plays a key role in understanding the product and billing frequency. This will help us target the right customers and help them make the right choices. Moving your Customer to Subscription Shifting to the subscription model is not easy. The subscription provider needs to meet customer demands while meeting business goals. Effective communication plays a key role in helping subscribers understand what is offered, free trial, sign up gift or discounting and so on. In addition, value adding some products to be more consistent is helpful. Customers need to be given the control to engage with the brand of their choice and ensure that they feel in control of their experiences. This is achievable through several channels - self-service or any other way of offering services. Conclusion The slowdown in business in 2020 has only increased the competition among subscription-based businesses and driven non-subscription companies to transform to meet new consumer demands for services. Retaining and growing active subscribers is core to succeeding in any economic climate and in the case of a downturn, will add a layer of urgency to mitigating and reducing churn. Therefore, subscription businesses including traditional retailers, e-commerce giants, tech companies, or high-end manufacturers will have to start using data to customize and enhance their products. This will enable them to have a better understanding of the customer and have a stronger market outlook. This is in turn will create competition ready businesses which can sustain themselves in the subscription service economy Industry: Abhijith S. Rao Lead Solution Architect - Zuora Practice, Wipro Limited Abhijith is a Zuora Certified Architect from Zuora University. He has helped implement Zuora for more than 40 subscription model projects in automobile, healthcare, software & IT, and real estate sectors. Abhijith current works as the lead Solution Architect for subscription model & economy for the Zuora Practice in Wipro Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire,

provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to reexamine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/sanjay-jaireth/ ---- Contact Wipro Blogs By Author Unlocking efficiency and economy for Indian public sector banks Please fill the required details to access the content Sanjay Jaireth Sanjay Jaireth Sanjay Jaireth currently heads the India BFSI unit for Public Sector Banks and Regulators. Sanjay started his career as a banker before he moved to manage large teams in investment banking, hedge funds administration, wealth management, and brokerage business. Sanjay has over 24 years of experience in financial services and banks. In the aftermath of COVID-19, cost efficiencies will be key decision drivers. Banks will need to efficiently deal with increasing non-performing assets and declining net interest margins. Simultaneously, public sector banks (PSBs) cannot afford to drop customer experience further and lose out to their digital counterparts. Banks needs to rethink their approach towards the total IT spend and should start considering the pay per use model especially after the PSB mergers. This will help them focus on their core business activities while their IT

needs can be managed by experienced IT providers.

### Unlocking efficiency and economy for Indian public sector banks

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Those PSBs that have adopted cloud have stuck to private clouds that are as expensive as the existing traditional solutions. This prevents them from passing any benefit to the customers or reinvesting in innovative solutions. Addressing PSB concerns around cloud adoption The main banking concerns around cloud have been with data security and privacy. Financial data is sensitive, and banks are reluctant to give away control of that data and move their core banking platforms to the cloud. However, hybrid cloud is a great solution to this problem. A hybrid cloud approach allows banks to keep mission critical applications on a private cloud and move non-core activities like back office processing to public clouds. Adopting the hybrid cloud model can offer public sector banks the advantages of the pay-per-use model, compute capabilities and the option to integrate with future-ready applications through APIs. In a world moving towards open banking, Indian PSBs cannot delay taking this first crucial step towards the future of banking anymore. The question is, will Indian PSBs drop their 'wait and watch' approach and take confident strides towards a cloud-first future? The future is flexible Banks are taking note and striding forward towards a more flexible future. For instance, for one of our large PSB clients, Wipro has enabled end-to-end outsourcing on an Application Service Provision (ASP) model. This provides a core banking solution (CBS) and allied solutions in over 100 SCBs and CCBs across India in over 3,500 branches in an integrated environment. The ASP model has 6 key advantages: As banks explore these new models, it is clear that opting for pay-per-use models can offer significant cost advantages and convert CapEx to OpEx. At Wipro, we have enabled this model for several clients. This helps them free up capital that PSBs can deploy for other IT investments. A third-party managing assets like data centers would also be able to keep them up to date on security and latest technology without the banks having to worry about software updates. A shift to the cloud and OpEx model will give PSBs the required agility and resources to navigate these turbulent times and be ready for the next innings of Indian banking. Are you ready to change the Industry: Sanjay Jaireth Sanjay Jaireth currently heads the India BFSI unit for Public Sector Banks and Regulators. Sanjay started his career as a banker before he moved to manage large teams in investment banking, hedge funds administration, wealth management, and brokerage business. Sanjay has over 24 years of experience in financial services and banks. Salesforce offers an incredible range of functionalities, making it difficult to www.wipro.com/blogs/sheetal-s-mehta/ ---- Contact Wipro Blogs By Author Why Cyber Resilience Depends on Trust and Information Sharing Please fill the required details to access the content Sheetal S Mehta Sheetal S Mehta Group CISO, Senior Vice President & Global Head - Cybersecurity & Risk Services (CRS) Sheetal, as the Chief Information Security Officer and Global Head, Wipro Cybersecurity is leading Wipro and its customers through a secure digital transformation journey. His focus is on delivering a sustainable cybersecurity risk posture for the ever-evolving digital landscape by simplifying digital risk management, ensuring security of sensitive information and building a sustainable framework for business resilience. His vision is to earn the trust of customers, partners and employees with best in class execution of global cybersecurity programs. Sheetal has been instrumental in leading and shaping Wipro's Cybersecurity & Risk Services (CRS) business which today is one of most valuable and

### Why Cyber Resilience Depends on Trust and Information Sharing

---- Arcticle source ---- https://www.wipro.com/blogs/sheetal-s-mehta/whycyber-resilience-depends-on-trust-and-information-sharing/ ---- About the Author Contact Wipro Related Blogs Data: A Strategic Asset Enabling Value Creation for Insurers Leading the Path to Recovery and Resilience AI IN DIGITAL LENDING Please fill the required details to access the content Why Cyber Resilience Depends on Trust and Information Sharing October | 2020 In the early stages of the pandemic, the sudden shift to remote work triggered a flood of cybersecurity threats. Of the nearly 200 organizations surveyed in Wipro's upcoming State of Cybersecurity Report 2020, the majority (70%) report challenges maintaining endpoint security. Phishing scams spiked; 73% of organizations cite them as their top security threat. Insider threats increased as well, and employers are looking for more adaptive security measures to safeguard remote workers. Under normal circumstances, organizations would take time conducting such a massive transition to ensure critical operations remain secure. But a pandemic is not normal circumstances. Businesses have had to act fast, and cybersecurity teams have had to catch up. Information sharing can reduce this lag time. By sharing information more freely, organizations can help each other address sudden shifts in working models and evolving cybersecurity demands to increase the overall resiliency of their operations. Building trust in information sharing For most organizations, understanding and assessing cyber risks is the top cyber resilience measure, and a majority claim they are confident in their ability to assess risks (59%, according to Wipro's State of Cybersecurity Report). Both government and corporate leaders are deeply engaged in promoting effective cybersecurity strategies, and global spending on security continues to rise - yet there was an almost 400% increase in cyber-attacks between January and April of 2020. Organizations definitely see the value in understanding new cyber threats and digital priorities, but they aren't successfully accessing or using information about these topics. If sharing information can help, why aren't organizations doing

it? A lack of trust, for one reason: Nearly 40% of CISOs claim that information sharing is hindered by a lack of trust. Businesses are reluctant to share with each other in fear that doing so will reveal sensitive company information. Likewise, businesses are reluctant to share with government agencies because doing so may reveal instances of non-compliance with government regulations or may violate customers' privacy expectations. To be truly effective, information sharing needs to be transparent and open, across borders and sectors. Information sharing and analysis centers (ISACs) are non-profit organizations focused on providing the infrastructure and governance necessary to increase trust and facilitate information sharing between public and private sectors. These centers are on the rise, across geographies and industries, yet many organizations are still hesitant. For information sharing to become a mainstream concept, organizations need adjust their mindsets: Rather than thinking of intelligence only as something to be consumed, enterprises should also view it as something to be generated and shared with the community. Collaborative cybersecurity: Communities of trust Organizations are often reluctant to share information about their security breaches, in fear that doing so will negatively affect brand reputation and intellectual property. But a lack of trust and poor cooperation between industry leaders will only give cybercriminals the upper hand. It is not enough to have defensive measures in place. Organizations need to anticipate risks, and exchanging information can help. Exchanging threat information within communities organized around specific industries or sectors (or any other shared characteristic) can be particularly beneficial because the member organizations likely face similar cyber threats - common tactics, techniques, and procedures used to target the same types of systems and information. Cyber defense is most effective when organizations work together to deter and defend against wellorganized, capable actors. Working with governments on cross-sector cybersimulation exercises can strengthen sectoral resilience and minimize crossindustry impacts due to cyber catastrophes. Such collaborations will reduce risks while improving the organizations' security postures. Accelerated, automated cyber defense Speed and scope are fundamental to an effective cyber-defense strategy. To act fast, organizations need a clear understanding almost in real time. No single organization, public or private, can ascertain threats based only on its views of the cyber landscape. Senior leaders in the industry need to emphasize the importance of sharing information, which can contribute to deeper threat analysis and even increase scope for detecting future threats. AI and machine learning (ML) will play a vital role in cybersecurity, especially on platforms where cross-sector and global collaborations are possible. Integrating AI and ML will drastically reduce threat-identification time by improving the manner in which information is received and the quality of that information. AI can help businesses understand the consequences of a breach and develop responses faster. This does not mean that an AI-based security system is an all-in-one solution, capable of addressing all cybersecurity concerns. AI-based solutions need to be developed further, by scientists and the companies producing these technologies, before they reach such a level. And to get the most out of the technology available now, businesses need to implement it and correctly, alongside human security teams capable of feeding it the necessary information and refining its operations needed. AI and machine-learning solutions will only be as good as the data that is being used to train their

systems, which underscores the importance of quality information that is readily available throughout the industry. With the proper alignment of technology and meaningful governance, a more trustworthy model of information sharing is possible, which can build a resilient defensive posture for businesses and public infrastructures, globally. COVID-19 has triggered a rise in interconnectivity among individuals and organizations. To continue supporting these connections and cybersecurity simultaneously, organizations need to work together to promote trust and the safe sharing of information. To learn more about cyber information sharing, check out this report by World Economic Forum, with contributions from Wipro. Industry: Sheetal S Mehta Group CISO, Senior Vice President & Global Head -Cybersecurity & Risk Services (CRS) Sheetal, as the Chief Information Security Officer and Global Head, Wipro Cybersecurity is leading Wipro and its customers through a secure digital transformation journey. His focus is on delivering a sustainable cybersecurity risk posture for the ever-evolving digital landscape by simplifying digital risk management, ensuring security of sensitive information and building a sustainable framework for business resilience. His vision is to earn the trust of customers, partners and employees with best in class execution of global cybersecurity programs. Sheetal has been instrumental in leading and shaping Wipro's Cybersecurity & Risk Services (CRS) business which today is one of most valuable and trusted cybersecurity partner for leading enterprises across the globe. He is responsible for strategy, practices, delivery, operations and sales. Under his leadership CRS grew from a 200-member team to a strong & robust global practice with over 8000 cybersecurity experts. With over 25 years of indepth Cybersecurity experience, Sheetal has led the development of multiple innovative initiatives & solutions that helped both Wipro and its Clients strengthen their digital security posture to the highest standards. Sheetal believes in a unique top down risk-based approach, which helps organizations align their enterprise risk with business risk, thereby delivering better business outcomes. The insurance industry has tradionally relied on data sources such as claims history to underwrite known and measurable risk. Not all companies were born digital, but they must now adapt to the digital demands of our world's current situation. As the wave of COVID-19 traverses across the world, business resilience has emerged as a strategic avenue. Banks/NBFCs (Lenders) and other traditional lending financial institutions find themselves operating in times where it is all about how well they know their customers, and how they can use this knowledge Arcticle source ---- https://www.wipro.com/blogs/anand-krishnan/ -----Contact Wipro Blogs By Author Intelligent Video Analytics: The Future 'Brains' of Business Please fill the required details to access the content Anand Krishnan Anand Krishnan Head - Artificial Intelligence, Wipro Anand brings with him over 23 years of experience at Wipro serving clients globally. He is passionate about technology and ways of applying it to enterprise problems envisioning the success it brings to clients. In his current role as Head of Artificial Intelligence, he is responsible for the entire AI ecosystem working with various units within and with startups / partners community for increasing AI adoption at client sites and driving requisite skills development across Wipro globally. Data is the new oil. The adage, coined by the UK mathematician Clive Humby in 2006, refers to how, like oil, data must undergo a refinement process before it can be put to real use.

It is the raw material capable of powering innovation. For this reason, data is a strategic asset for any organization today.

#### Intelligent Video Analytics: The Future 'Brains' of Business

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gradually realizing the power of intelligent video analytics. Last year, the video analytics market size was valued at \$4.10 billion and is projected to reach \$20.80 billion by 2027, growing at a CAGR of 22.7% from 2020 to 2027. Deriving value from intelligent video analytics: Six key use cases Traditionally, increasing security threats and the need for advanced surveillance have driven demand in the video analytics market. Recent advances in AI and machine learning, big data, edge computing and specialized multi-spectral camera hardware have increased adoption of AIpowered video analytics to move beyond providing basic security and surveillance. These advances have increased adoption of AI-powered video analytics to move beyond providing basic security and surveillance to strengthen operations and improve customer satisfaction. Other practical use cases for video analytics include: Unlocking the new business value Intelligent video analytics have the potential to connect nearly any organization - from smart cities to retail, manufacturing to healthcare - to data and insights that were not possible with traditional methods. Advances in deep learning, IoT, cloud, and edge computing will provide more opportunities to harness the power of that data, and accelerate business transformations. In the meantime, ethics and privacy concerns stand in the way of widespread adoption. The rise of explainable and ethical AI will likely help overcome these challenges. Partnering with an expert in intelligent video analytics can help organizations adopt video analytics strategically, ethically, and accelerate their journeys towards intelligent enterprise by infusing AI into their business processes. Intelligent video analytics will surely be the next competitive battleground, and forward-looking organizations that become early adopters of the technology will be uniquely positioned to reap its limitless benefits. Industry: Anand Krishnan Head -Artificial Intelligence, Wipro Anand brings with him over 23 years of experience at Wipro serving clients globally. He is passionate about technology and ways of applying it to enterprise problems envisioning the success it brings to clients. In his current role as Head of Artificial Intelligence, he is responsible for the entire AI ecosystem working with various units within and with startups / partners community for increasing AI adoption at client sites and driving requisite skills development across Wipro globally. Anil Kumar Damara Head - Data, Analytics, and AI Strategy Group, Wipro Anil leads the Data, Analytics, and AI Strategy group at Wipro. He has over 16 years of experience, largely in Data, Analytics and the AI ecosystem. His core skills include strategy planning and execution, digital advisory and operations. Princegiri Goswami Prince is a part of the Strategy & Planning function in Data, Analytics, and AI service line at Wipro. His areas of expertise include analytics and AI, and he helps drive cohesive strategies with market insights, competitive landscape and related ecosystems. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and

other devices used by the organization's work force.

www.wipro.com/blogs/srini-rajamani/ ---- Contact Wipro Blogs By Author Selling consumer products in the time of COVID-19: 3 Digital transformation tips to succeed The customer of 2021: how has COVID-19 changed consumer expectations? Driving Diversity and Equity in Clinical Trials Advancing Supply Chain for the Second Wave of Direct-To-Consumer Businesses The Impact of COVID-19 on Consumer Goods After COVID-19, Digital Transformation Is No Longer Optional Please fill the required details to access the content Srini Rajamani Srini Rajamani Senior Vice President & Sector Head - Consumer and Life Sciences, Wipro Limited. Srini is passionate about helping companies reimagine their business: he has been delivering transformation to global clients in CPG, Retail, Manufacturing, and Finance over the last 25 years. Srini has served in key leadership roles at Wipro for over a decade, gaining extensive experience in strategy, client engagement, global delivery, shared services build and execution, and effective team building. In his current role, he holds end-to-end P&L responsibility including Delivery, Sales, Solutions, and New Markets for Consumer and Life Sciences industries at Wipro. These industries cover Life Sciences and Pharma, Biotech, Food, Beverage, Retail Apparel & Footwear, Home and Personal Care, and Agriculture across all service lines in Wipro. Srini works closely with advisors and industry analysts as a thought leader to design solutions to key business problems. He has presented in several industry forums and Wipro strategy events on the challenges organizations face in their digital, technology and operations spaces. Srini is based in the Greater NY region. As the retail sector continues to adapt and evolve to a post-pandemic environment Srini Rajamani, senior vice-president & sector head - consumer and life sciences at Wipro Limited, discusses how customer expectations in 2021 have been shaped by COVID-19 Roughly 10% of the case-patient participants identified as Black. Over the past two decades, there has been a steady rise in online traffic caused by consumers turning to the internet and social media to shop for everyday essentials, rather than brick-and-mortar stores. Supply chain disruptions and demand shifts have forced the consumer goods industry into the digital age. Here's how businesses will adapt to the new normal. When the pandemic hit, online and mobile sales became a lifeline for companies. The key business takeaway of 2020 has been that the time to digitize is now.

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#### After COVID-19, Digital Transformation Is No Longer Optional

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COVID-19: 3 Digital transformation tips to succeed Please fill the required details to access the content After COVID-19, Digital Transformation Is No Longer Optional November | 2020 When the COVID-19 pandemic first hit, businesses and entire industries that had never emphasized e-commerce suddenly began selling primarily (or exclusively) online. Online food and beverage sales have jumped by almost 60% this year, and health and beauty products are up over 30% — two product categories that people primarily bought in-person before the pandemic. Now that proximity is a public health hazard, e-commerce is a huge asset in any industry. Companies that would have never considered selling through a B2C website — in agriculture or alcohol and tobacco, for example — are enjoying huge online sales right now. In some cases, online and mobile sales have been a lifeline for companies that saw COVID-19 obliterate their traditional business models. But not for everyone. The pandemic sent huge amounts of commerce online, but that doesn't mean every company or industry was equipped to meet customers there. After all, success in e-commerce takes more than a website. Retailers also need complex transportation and delivery networks to handle fulfillment, plus an infrastructure of staff, technology, and leadership to make e-commerce truly work. No wonder early adopters have been more successful; Target, which has invested heavily in e-commerce for years, is seeing earnings up 80% over last year, while retailers with less digital experience are struggling to attract customers online. It's a tale of two pandemics: the best of times for some and the worst of times for others. The difference reveals the importance of digital transformation before the pandemic — and especially after. Technological Change in a Post-COVID World The economy was booming at the start of 2020, yet the unemployment rate was above 14% by April. Rarely in modern history have national fortunes taken such a swift and severe turn for the worse. No one could have seen these events of 2020 coming, but even with early warning, the speed of the effects would have caught anyone off-quard. How quickly and capably a company managed to pivot was largely determined by their progress towards digital business transformation. Frito-Lay offers a good example. Before 2020, no one bought chips online. Once it became riskier to buy them in person, Frito-Lay launched Snacks.com, a B2C e-commerce site that makes it both easy and engaging to shop for Cheetos via the web. Not every snack retailer has had the foresight or the resources to create an attractive (and fully supported) online presence in a matter of weeks or months, which gives Frito-Lay a distinct advantage. Online snack shopping is just one instance of companies leveraging a digital transformation strategy to make the most of an unprecedented situation. Nike is using apps to help people track their fitness during the pandemic and purchase the gear they need for new workouts. Best Buy is using a compelling website and curbside pickup to entice customers leery of venturing into the store. Thanks to existing progress made on a digital transformation road map, these and other brands have managed to adapt to the pandemic rather than be blindsided by it. What We've Learned About Digital Transformation The COVID-19 pandemic has proved that digital transformation isn't just nice to have; it's essential. And it's not only a CIO priority, either. The imperative belongs to the CEO, spreads across the C-suite, and applies to every aspect of the enterprise. For example: No matter how the COVID-19 pandemic concludes, it's clear that things will never be the same. The digital behaviors people are adopting — buying groceries online, connecting via Zoom calls,

working remotely — will become permanent features of the tech-driven future. There has never been a better time to pursue digital transformation or a worse time to delay it any longer. Industry: Srini Rajamani Senior Vice President & Sector Head - Consumer and Life Sciences, Wipro Limited. Srini is passionate about helping companies reimagine their business: he has been delivering transformation to global clients in CPG, Retail, Manufacturing, and Finance over the last 25 years. Srini has served in key leadership roles at Wipro for over a decade, gaining extensive experience in strategy, client engagement, global delivery, shared services build and execution, and effective team building. In his current role, he holds end-toend P&L responsibility including Delivery, Sales, Solutions, and New Markets for Consumer and Life Sciences industries at Wipro. These industries cover Life Sciences and Pharma, Biotech, Food, Beverage, Retail Apparel & Footwear, Home and Personal Care, and Agriculture across all service lines in Wipro. Srini works closely with advisors and industry analysts as a thought leader to design solutions to key business problems. He has presented in several industry forums and Wipro strategy events on the challenges organizations face in their digital, technology and operations spaces. Srini is based in the Greater NY region. The consumer packaged goods (CPG) industry was badly affected by the pandemic, much like several other industries. Organizations in this industry therefore relied on retail In 2020, the pandemic rattled global supply chains As the retail sector continues to adapt and evolve to a post-pandemic environment

#### The Impact of COVID-19 on Consumer Goods

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online presence to meet with this new reality head-on, others have struggled. For instance, bargain stores such as TJ Maxx, which traditionally relied on brick-and-mortar locations to preserve their "treasure hunt" experience, now find themselves forced to consider digital transformation for the first time. The entire consumer goods industry, in fact, has been forced into the digital age. For those suffering from limited cash flow, it's certainly not easy to implement the required changes — but in many ways, this shift to an online world was inevitable. Consumers were headed online well before COVID-19, and now retailers have even more incentive to meet them there. The pandemic forced everyone's hand to digitally transform, and now it's up to businesses to adapt to succeed. How Businesses Will Adapt to the New Normal At first, these changes felt like anomalies — waves that could be ridden to calmer waters not too far away. Now, however, after eight months and no clear end in sight, it's apparent that these disruptions aren't going anywhere any time soon and that companies will have to adjust to this new reality if they want to survive. That will mean adjusting to the new requirements of e-commerce. Consumers are shopping differently, with more evolved journeys and expectations. They now demand more product personalization, which means that shipping completed products will no longer cut it. Instead, companies have to transport raw materials that can then be put together locally, dependent on individual customer needs. That requires a complete change in not just supply chain management, but also inventory management. Most companies order products as much as six months in advance. Usually, most of those products would go straight onto shelves into retail stores. Now, however, with many stores limiting in-person shopping and a huge number of people buying online, that chain is broken. Add to this the various costly disruptions and bottlenecks in the supply chain, and you have a system in need of restructuring. Prioritizing Investment in Digital Transformation in a Time of Crisis For many consumer goods companies, the pandemic has become a liquidity crisis more than anything else. Building a new supply and sales strategy requires the investment of both time and money in transforming retail inventory management, warehouse inventory management, supply chain management, and more. But how can companies find the investment for a successful digital transformation when they're already struggling with cash flow issues? Depending on the business you're in, that investment could be easier said than done. If you're in the frozen food business and saw sales go up 94% at the height of the lockdown, for example, then you likely have the money you need to invest in e-commerce inventory management and everything it entails. If, however, you're in a different industry, such as apparel, where revenue was down 45% from March to May 2020, then it won't be so easy. For these sectors, you'll have to figure out what to cut in order to invest in digital. Ideally, you can obtain cash for investments from variable costs — stock buybacks, discretionary charges, bonuses, and the like. Depending on how much you can cut, these could potentially provide the funds to invest in the transformation of the inventory management process and e-commerce strategy. If not, then some fixed costs might also need to be cut, because these changes can't wait. Now is the time to go bold and invest in an online infrastructure that values personalization and customer engagement. It's only through this that consumer goods companies can hope to weather not just this wave, but the ones that follow. This is a storm that could go on for a long time. It is

possible to get through this, but not by relying on business as usual. Industry: Srini Rajamani Senior Vice President & Sector Head - Consumer and Life Sciences, Wipro Limited. Srini is passionate about helping companies reimagine their business: he has been delivering transformation to global clients in CPG, Retail, Manufacturing, and Finance over the last 25 years. Srini has served in key leadership roles at Wipro for over a decade, gaining extensive experience in strategy, client engagement, global delivery, shared services build and execution, and effective team building. In his current role, he holds end-to-end P&L responsibility including Delivery, Sales, Solutions, and New Markets for Consumer and Life Sciences industries at Wipro. These industries cover Life Sciences and Pharma, Biotech, Food, Beverage, Retail Apparel & Footwear, Home and Personal Care, and Agriculture across all service lines in Wipro. Srini works closely with advisors and industry analysts as a thought leader to design solutions to key business problems. He has presented in several industry forums and Wipro strategy events on the challenges organizations face in their digital, technology and operations spaces. Srini is based in the Greater NY region. The consumer packaged goods (CPG) industry was badly affected by the pandemic, much like several other industries. Organizations in this industry therefore relied on retail In 2020, the pandemic rattled global supply chains As the retail sector continues to adapt and evolve to a post-pandemic 

## Advancing Supply Chain for the Second Wave of Direct-To-Consumer Businesses

----- Arcticle source ----- https://www.wipro.com/blogs/srini-rajamani/ advancing-supply-chain-for-the-second-wave-of-direct-to-consumerbusinesses/ ---- About the Author Contact Wipro Please fill the required details to access the content Advancing Supply Chain for the Second Wave of Direct-To-Consumer Businesses January | 2021 Over the past two decades, there has been a steady rise in online traffic caused by consumers turning to the internet and social media to shop for everyday essentials, rather than brick-and-mortar stores. Companies like Warby Parker (eyeglasses), Casper (mattresses), and Wayfair (furniture) marked the dawning of the direct-to-consumer (DTC) era. These DTC brands understood the changing retail landscape, the evolving consumer habits and preferences, and rose to prominence by employing strategies that were still relatively new at the time, such as direct distribution, web-only retail, and social media marketing. Fast forward to today. With the coronavirus pandemic forcing many consumers to stay home, online traffic and ecommerce sales have grown substantially. Even those who prefer in-store shopping have had to consider digital alternatives. Mid-pandemic, digital sales were up 77.8% year over year to \$82.5 billion, tracking higher than holiday shopping levels on Black Friday and Cyber Monday, according to data from Adobe. For help accommodating this sudden surge in direct-toconsumer sales, and navigating the transition from physical to digital stores, businesses are turning to sophisticated supply-chain technologies. At the same time, established players are looking for ways to use supply-chain and logistics technology to bypass regional distribution centers and get their products in the hands of consumers faster. Adapting to the DTC lifestyle Even as lockdowns lift and states begin to reopen, companies should avoid depending solely on the reopening of their physical storefronts and instead shift focus to DTC strategies. Here are three ways organizations can implement and embrace their own DTC pipeline: The rise of e-commerce is not surprising, but COVID-19 has accelerated the transformation of retail and triggered other unexpected disruptions throughout the industry. To keep up with these changes, organizations large and small need to reevaluate their supply chain models and develop strategies that are strong enough to support this new wave of DTC, yet flexible enough to support whatever comes next. Srini Rajamani Senior Vice President & Sector Head -Consumer and Life Sciences, Wipro Limited. Srini is passionate about helping companies reimagine their business: he has been delivering transformation to global clients in CPG, Retail, Manufacturing, and Finance over the last 25 years. Srini has served in key leadership roles at Wipro for over a decade, gaining extensive experience in strategy, client engagement, global delivery, shared services build and execution, and effective team building. In his current role, he holds end-to-end P&L responsibility including Delivery, Sales, Solutions, and New Markets for Consumer and Life Sciences industries at Wipro. These industries cover Life Sciences and Pharma, Biotech, Food, Beverage, Retail Apparel & Footwear, Home and Personal Care, and Agriculture across all service lines in Wipro. Srini works closely with advisors and industry analysts as a thought leader to design solutions to key business problems. He has presented in several industry forums and Wipro strategy events on the challenges organizations face in their digital, technology and operations spaces. Srini is based in the Greater 

#### **Driving Diversity and Equity in Clinical Trials**

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white. While the COVID-19 vaccine trials don't exactly match the population estimates of the United States, they are closer than trials have historically been. Previous FDA reports on clinical trials found that those identifying as Black or African American accounted for roughly 5% of sample populations, while Hispanic and Latino individuals made up about 1%, Asian Americans 6%, and Native Americans were excluded from nearly two thirds of trials examined. Diversity is essential in clinical trials to ensure medications and treatments are safe and effective for the populations they're intended to help. Unfortunately, clinical trials have a long history of underrepresenting women and people of color, resulting in treatments designed primarily for white men. Underrepresented groups are therefore more skeptical to receive new treatments, putting them and their communities at greater risk. Why do trials lack diversity? Lack of trust in the medical system prevents many people of color from participating in clinical trials, particularly members of the Black community. The United States has a history of deceptive and biased medical treatment. Although groups are working to mend that relationship and build trust in public health, some clinical trial practitioners still do not share information about clinical trials with all demographics. There is also a lack of clear, targeted communication about trials. While individuals may know about a trial, they may not know details like what the trial entails, if they're eligible, if they can fit it in their schedule, if they'll have to pay for it. Logistics concerns are another barrier to entry. Hourly workers may not be able to afford taking off work for a trial. They may need additional childcare or domestic support. They may lack reliable transportation and be unable to commute for treatment. Funding for research tends to go to larger institutions which may be far from volunteers' typical medical provider. Especially rare conditions may only be researched in one or a few cities in the world, requiring volunteers to relocate for the duration of the trial. While trials do offer financial support through deductions and compensation for expenses, the details of this support can be hard to find, difficult to understand, and inconvenient to pursue. How can we promote diversity in clinical trials? Sample diversity is essential for adequate testing and safe, quality healthcare for all. Increased focus on equal representation in clinical trials is a step in the right direction, but the health of our communities requires ongoing effort from researchers. Industry: Srini Rajamani Senior Vice President & Sector Head - Consumer and Life Sciences, Wipro Limited. Srini is passionate about helping companies reimagine their business: he has been delivering transformation to global clients in CPG, Retail, Manufacturing, and Finance over the last 25 years. Srini has served in key leadership roles at Wipro for over a decade, gaining extensive experience in strategy, client engagement, global delivery, shared services build and execution, and effective team building. In his current role, he holds end-to-end P&L responsibility including Delivery, Sales, Solutions, and New Markets for Consumer and Life Sciences industries at Wipro. These industries cover Life Sciences and Pharma, Biotech, Food, Beverage, Retail Apparel & Footwear, Home and Personal Care, and Agriculture across all service lines in Wipro. Srini works closely with advisors and industry analysts as a thought leader to design solutions to key business problems. He has presented in several industry forums and Wipro strategy events on the challenges organizations face in their digital, technology and operations spaces. Srini is based in the Greater NY region. Let's start with a case study. A mid-sized pharmaceutical company, engaged

in packaging artwork management and artwork studio services, did not deploy artwork proofreading system at the artwork studio level, though it had an electronic proofreading system in review and approval stage for the Regulatory Affairs (RA) team. Due to this structure, the approval process to finalize an artwork was long and tedious. Any error introduced by the artwork studio was picked at the review and approval stage, further adding time to the artwork approval process and increasing the number of versions. Label and artwork management in medical device companies are still seen as an afterthought and therefore, there is not enough concentration as well as investment in this area. However, with new updates such as traceability (UDI) and e-labeling, companies are compelled to invest time and money to be compliant on the regulations required. Today's patients see digital technology as an enabler in their journey to wellness - they are always connected, and this has fundamentally changed their expectations and behaviors. Read on to know more how the technology landscape is enabling 

## The customer of 2021: how has COVID-19 changed consumer expectations?

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stated — just a few months ago — that they would feel safe shopping in a store. Now, even with the UK vaccine rollout moving at pace, the expectation of getting items to the consumer's door quickly and safely are showing no signs of subsiding soon. What we've understood so far is that consumers in 2021 want speed and convenience. That's great for store-todoor delivery, but what does it mean for personalisation? Businesses are now looking outside the standard sphere of e-commerce and are starting to differentiate themselves through hybrid technology setups to appeal — and engage with — consumers in unique ways. Specifically, augmented reality (AR) and virtual reality (VR) are set to completely transform the face of shopping. Experts predict the impact of these technologies will revolutionise the industry just as much as the internet did through e-commerce. In working with retailers to both define and implement the appropriate digital strategies to drive personalisation and engagement, technology solutions providers can go a long way towards helping retailers transition to this new digital marketplace, spurred by consumer demand. Trying clothes on can now be done at the click of a button. Advancements in AR have now materialised in a virtual dressing room through a full-length mirror-style TV powered by a motion-capture camera. Instead of walking in and out, and taking the time to chop and change items, consumers can view garments on storable, digital versions of themselves. The entire environment is controlled by gestures, and social media connectively means consumers can share outfits and receive real-time thoughts and feedback from friends and family. This is just one of the many ways that AR can impact the retail sector by going 'phygital'. In an increasingly competitive market, such technology solutions can help retailers build a competitive advantage by changing the way customers interact with a brand. Adding to this, through the development of innovative engagement platforms, retailers can change consumer-facing processes to make them more experiential too. For instance, interactive store-front displays that refresh at intervals throughout the day can showcase a brand's offering in a much more versatile and targeted manner. Another area in which technology can support the sector, is in helping some with systems that enable manneguins to model garments in real-time. Catering to high-street fashion, more stores are installing 'boutique vending machines' that sell luxury products through an interactive, digital sales process. The key, ultimately, is to make the in-store experience seamless, and the online experience just as tailored. The demand and growth of online alternatives has pushed retailers to reassess the value of the in-store experience and assess their strategy moving forward. The truth is, there remains a place for bricks and mortar. However, consumer expectations around speed and personalisation have sky-rocketed, and the same goes for services online. Investments in experience need to ensure that they make sense from a brand perspective, increase consumer engagement, add value, and result in a financial return. The customer of 2021, and beyond, has high expectations. To meet them, businesses will need to invest in the right technology to keep themselves one step ahead. This blog was originally published under the author's name on Information Age. Industry: Srini Rajamani Senior Vice President & Sector Head -Consumer and Life Sciences, Wipro Limited. Srini is passionate about helping companies reimagine their business: he has been delivering transformation to global clients in CPG, Retail, Manufacturing, and Finance over the last 25 years. Srini has served in key leadership roles at Wipro for

over a decade, gaining extensive experience in strategy, client engagement, global delivery, shared services build and execution, and effective team building. In his current role, he holds end-to-end P&L responsibility including Delivery, Sales, Solutions, and New Markets for Consumer and Life Sciences industries at Wipro. These industries cover Life Sciences and Pharma, Biotech, Food, Beverage, Retail Apparel & Footwear, Home and Personal Care, and Agriculture across all service lines in Wipro. Srini works closely with advisors and industry analysts as a thought leader to design solutions to key business problems. He has presented in several industry forums and Wipro strategy events on the challenges organizations face in their digital, technology and operations spaces. Srini is based in the Greater NY region. The consumer packaged goods (CPG) industry was badly affected by the pandemic, much like several other industries. Organizations in this industry therefore relied on retail In 2020, the pandemic rattled global supply chains As the retail sector continues to adapt and evolve to a postpandemic environment ==============

## Selling consumer products in the time of COVID-19: 3 Digital transformation tips to succeed

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incredibly likely that this trend will continue. Companies who crack online retail sooner are sure to have a massive advantage as they adapt not only to the retail environment designed by the pandemic, but also in the decades to come. In the CPG industry itself there was a mass shift to working from home during lockdown. Now, it is likely that hybrid working forms will become more prevalent, and to support this shift, businesses must ensure key practicalities are met including connectivity, set-up, and security. Confirming that these employees can connect to the internet as well as any additional work networks/systems, with the devices they need to do so, such as laptops and adequate WFH set-ups, is a vital step that cannot be overlooked. Security is also of paramount importance. Employees' devices must be secure and compliant for remote working conditions. When the pandemic struck, organisations didn't have the luxury of planning or preparation when it came to enabling their workforce to turn remote overnight. As a result, many businesses have had to ensure they have the right toolset to manage the migration to working from home, not only amid the pandemic, but also to support hybrid working forms in the future. These tools include enhanced security options, increased security training and hiring the right people to lead the security arm of their business; security under these new conditions might be easy to temporarily overlook, but this oversight can result in massive setbacks for those who don't re-examine their cyber security protocols considering the work from home shift. Digitise your supply chain The CPG industry faces the additional challenge of ensuring the safety of their workforce, as many factory employees are not able to work from home. Under lockdown restrictions, firms had to address new restrictions that meant employees could be compelled to work on reduced shifts, or not at all. This meant that supply chains are likely to be in disarray, with components missing or the final product not able to be manufactured, thus leaving orders unfulfilled. Now, with many workers back onsite, it is of utmost importance that businesses are able to sustain manufacturing and shipping processes for products on time. While customers may have forgiven a slight delay when the crisis first hit, we have quickly moved into a new normal in which customers expect businesses to have adjusted their workflows to adapt to the new environment. The solution to this is the digitalisation of production and supply chains. Moreover, digitising supply chains can enable faster, more efficient and responsive processes resulting in greater productivity and quality. With working restrictions in place, this is one-way firms can claw back some of the efforts lost by the reduction. Taking advantage of technologies such as Artificial Intelligence and Machine Learning can greatly benefit businesses who rely on supply chains by integrating smart machines that can learn and react with less human maintenance and monitoring, thus speeding up production and taking pressure off limited workers. For many firms in the CPG space, the pandemic and its aftermath has seen them turn to new and exciting emerging technologies to continue to operate effectively. There are ways for all CPG businesses to look at transforming their supply chain and manufacturing to benefit from the solutions digitalisation can offer. Package goods virtually With the mass shift to online services appearing to be permanent, businesses must have an engaging digital presence. Being able to offer customers top of the range online access, demonstrate products, or illustrate functionality is essential to ensure businesses do not lose out on market share. In the CPG space, businesses cannot afford to leave

customers with questions. In fact, online sales are an opportunity to provide them with even more information. Demo videos, user reviews, virtual or augmented reality that can transport the product directly into a consumer's home and many more options are available, which can help to package consumer goods in a convincing way which responds and caters to all consumers curiosity. On the internet, the company doing the selling is just as much as part of the product. Businesses need to ensure that during this constantly shifting climate that customer experience is still top quality. This means customers will expect quick responses to their enquiries, an accessible website for a diverse range of audiences, and the ability to adapt to new manufacturing restrictions, with goods being delivered in a timely manner. A lacklustre option of any one of these factors will create a significant dent in customers' trust a business has worked hard to build and retain, which is incredibly important as retail reopens. Likewise, a business with a good reputation and the ability to adapt digitally will help to retain those reviews online and that reputation will add to their value. Conclusion The takeaway for all companies from this dramatic digital shift should be that increasing your digital presence is no longer a luxury, but rather an imperative for business survival. The global crisis has pushed the need to be digital to the forefront of the business agenda. All companies in the CPG space need to embrace digital transformation wholeheartedly, from hybrid working, to supply chains to sales. In brief, it is essential to take care of the workforce and employees first, reinvent production processes second and, lastly, ensure services to consumers are top notch. Industry: Srini Rajamani Senior Vice President & Sector Head - Consumer and Life Sciences, Wipro Limited. Srini is passionate about helping companies reimagine their business: he has been delivering transformation to global clients in CPG. Retail, Manufacturing, and Finance over the last 25 years. Srini has served in key leadership roles at Wipro for over a decade, gaining extensive experience in strategy, client engagement, global delivery, shared services build and execution, and effective team building. In his current role, he holds end-to-end P&L responsibility including Delivery, Sales, Solutions, and New Markets for Consumer and Life Sciences industries at Wipro. These industries cover Life Sciences and Pharma, Biotech, Food, Beverage, Retail Apparel & Footwear, Home and Personal Care, and Agriculture across all service lines in Wipro. Srini works closely with advisors and industry analysts as a thought leader to design solutions to key business problems. He has presented in several industry forums and Wipro strategy events on the challenges organizations face in their digital, technology and operations spaces. Srini is based in the Greater NY region. The consumer packaged goods (CPG) industry was badly affected by the pandemic, much like several other industries. Organizations in this industry therefore relied on retail In 2020, the pandemic rattled global supply chains Srini Rajamani, senior vicepresident & sector head - consumer and life sciences at Wipro Limited, discusses how customer expectations in 2021 have been shaped by www.wipro.com/blogs/robert-lund/ ----- Contact Wipro Blogs By Author An Effective Strategy for Transparent and Aligned Enterprise KPIs Please fill the required details to access the content Robert Lund Organizations are increasingly taking the initiative to embrace alignment and transparency in key performance indicators (KPI) and reporting.

#### An Effective Strategy for Transparent and Aligned Enterprise KPIs

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clearly articulate the need to do so and their course of action or risk sending unintended ripples throughout the impacted areas of the business. This alarm can be triggered as owners over the respective areas may become naturally territorial at the perceived risk of losing a capability that provides them with the levers for managing their business and that they, in all likelihood, were required to develop over a number of years. In such a program, several key parameters must be communicated at the onset. Foremost among the rationale that will be laid out should be that the these efforts are being extended to better manage, measure and analyze the performance of the business and the intent is to not take away any of the unique KPIs, data sets or reports that have been created across the business. This is not to suggest that change will not occur but rather the capabilities that the business has come to rely on will not be lost. The starting point: Time for pre-planning Executive oversight will be critical to the overall success of this program as it will touch multiple areas of the business, span across multiple quarters and require regular coordination across impacted areas of the business. Ownership, versus sponsorship, for this type of initiative is inherent due to a level of involvement that will eclipse a simple acknowledgement of the program in a project kickoff email or slide but will require some level of time commitment and potentially making several unpopular decisions throughout the project. It is also important at this stage to consider who will assist you in running this program. Initially you should consider identifying a strong senior project manager and later with the help of the team look for strong business analysts, data analysts, data governance support, change management team input and visualization / report designers to assist with the creation of any new reports that will be created as a result of these efforts. As the executive sponsor, once you have committed to this undertaking you will need to allocate sufficient time to gather the KPIs that you are measured against and identify what additional KPIs are needed to give you visibility into each area of your business. This pre-planning will pay dividends throughout the duration of this program and serve as the bedrock for your alignment strategy. Any oversights in this stage may create significant rework and additional planning iterations in the future. Not every operational area may need to participate in this program. This should be determined by the previous exercise of determining the KPIs that are in-scope at the executive level. Loosely defined, operational leaders who own the processes that drive the various KPIs should most definitely be involved. Outside of the owners of these KPIs, it is good to create awareness but their participation in not critical. It is also to consider at the onset how many levels in your organization that you would like to drive this change. The answer varies by company and typically centers on the size of your company, how systemsbased data is, and how complex the organizational structure is. A good rule of thumb to follow is that the any data that is embedded in an executive level report be addressed directly through this process. Ownership should then be handed off the respective area leaders to oversee the process at the lower levels of the organization. With an understanding of what KPIs are needed at your level, it is time to introduce the project to all the relevant functional leaders reporting to you and reinforce that there is an expectation that they will support the program and that their focused participation is required. Typically, this group comprises the project steering committee, which receives regular updates on the milestones and assists with removing

any barriers that the project team encounters. More importantly, the active participation by each of your leaders will help promote project ownership and heighten adoption within their teams. Deconstructing enterprise KPIs Once your team has been updated and enterprise KPIs identified, it is time to initiate one of the most critical stages of the program. This is achieved, in part, through a series of discussions or workshops with the steering committee members, internal data SMEs, and other team members with a deep understanding of reporting across the respective business areas. The KPIs that are defined at this stage will cascade throughout the various operational areas where they apply. From a governance perspective, these KPIs will be 'locked' and supersede similar KPIs that will be discovered across the operational areas as well as lower levels of the organization. Each KPI must undergo a rigorous review that encompasses: As the enterprise KPIs are finalized, work will then move to defining the KPIs within each of the operational areas in a similar manner. Working horizontally across the organization The next step will be to address each business area following the same process as previously described. As we address the various operational areas, unique KPIs will emerge. The goal of this exercise is not to blindly rationalize any new area-specific metrics but rather to ensure that the critical enterprise KPIs are cascading throughout the enterprise correctly. As we move to address the operational areas, we must do so with two additional considerations in mind. First, it is unlikely that the project will have the capacity to address all operational areas at once. This will then require some prioritization to determine the cadence for addressing each area. There are multiple approaches that can be applied for determining the order with some of the more common approaches including; address the smaller areas first to establish some program momentum, identify the areas with the greatest overlap with the enterprise KPIs, select an area with the strong reporting and data teams, etc. What is important is that a schedule is defined and the various teams are aware of the upcoming effort that will be required to support the project. Secondly, as we begin to address other areas of the business, we need to be cognizant of those KPIs that have already been defined at high levels of the organization. Recall that these KPIs are considered to be 'locked' and their definition and naming convention will be of a higher priority than those discovered in other areas of the business. To address this point, KPIs that have similar naming conventions or have similar definitions should be identified, reviewed, and updated if needed, to avoid confusion. For example, at the enterprise level, we may have validated a KPI called operating margin. What we discover when we look at the manufacturing area is that a similar operating margin KPI exists, however when reviewing the definition, we find that different source systems are used that contains addition business logic and results in a slightly different calculation. In such an instance, the source systems will need to be updated to align to the enterprise calculation or the naming convention for the manufacturing version will need to be revised. The same process of collecting, analyzing, mapping and cataloging each KPI will be followed for every identified area. Once complete, this second level of the business will then be considered 'locked' and supersede those discovered in lower levels of the organization. Drilling vertically into each area Once all the identified business areas have been addressed, the focus will center on the various groups in those areas. For example, continuing the manufacturing example, once top-level manufacturing KPIs have been

addressed, the process will be repeated for areas such as, production, quality, inventory shipping, depending how your organization is structured. It is important to note that as we drill vertically through the various levels of the enterprise, each level will again have its own set of specific KPIs that are used to monitor those areas but will not require upward visibility. For example, the COO will have interest in monitoring overall manufacturing efficiency, however, the details on the downtime of specific machinery within a manufacturing site may be too granular. That said, those details would be crucial for driving efficiency to the head of manufacturing or a plant. These operational level KPIs, will then need to undergo the same vetting scrutiny and cataloging for each area, as did the enterprise KPIs. Once the data and reporting efforts have been completed for the identified areas, we are not yet complete. We must ensure that consumers of the reports and KPIs are aware of the recent changes to the KPIs. Several processes must also be established to ensure that the efforts that have been extended to cleanse the data, KPI and reporting capabilities remain pristine. Establishing a change management program to ensure adoption A change management program is needed to support users during this period of transition. This is especially true as users are required to acclimate themselves to new data, tools, processes and KPIs. The change management program should be used to create awareness throughout the user community of pending changes. Information provided by the program should pulse information on key dates, directions on where to obtain new tools and the retirement schedule for legacy tools, data sets and reports. The information provided by the Change Management team should also work closely with the project team to create visibility around the impacted and newly defined KPIs. Building a process to review existing reports and create new reports Once the reports containing the KPIs have been operationalized, governance and review processes must be implemented to ensure sustainability of the reporting function. This process will enable reporting teams to maintain a control over the existing reports, KPIs and data as well as the development of new reports and future data acquisitions. This can be accomplished through the creation of a data and reporting committee. This group should comprise of stakeholders from all operational areas who have at least a working knowledge of the reports and KPIs for their area. This committee will be responsible for establishing a regular review cycle of existing reports, enable revisions to existing reports and work with the business on the creation of new reports as well as the acquisition of new data sets when required. Effective KPI management An effort to align KPIs across an organization require significant effort, planning and coordination. While each project ultimately encounters unique challenges as the team works through various levels of the organization, having a framework defined at the onset of the program will greatly lessen impediments. Additionally, defining processes to inform data consumers and protect the data integrity post-project will help ensure ongoing integrity of the newly defined KPIs and reports. There are plenty of ways your enterprise can benefit from adopting a top-down approach to KPI management. To know more about our approach, reach out to our experts at millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the

# How to overcome the common barriers to Automation: 3 Emerging Trends

----- Arcticle source ----- https://www.wipro.com/blogs/varadharajan-s/how-toovercome-the-common-barriers-to-automation-3-emerging-trends/ ----- About the Author Contact Wipro Related Blogs AI Helps Insurance Companies Make Smarter Decisions Why Digital Transformation Is All About People CIO & the Art of Parenting Please fill the required details to access the content How to overcome the common barriers to Automation: 3 Emerging Trends December | 2020 Depending on where you get your news, we're either entering a golden age of AI and automation or the robots are coming for our jobs. Proponents on each side of this coin have been espousing their ideas for more or less a decade, but they all tend to ignore what's emerged as an objective truth: Most business process automation implementations are beset by obstacles including legacy infrastructure, a tendency to amass assets, and a monolithic approach to implementation. Business leaders tend to think of legacy infrastructure as an investment that's already been made. Unfortunately, as new pay-per-use and outcome-based models emerge, legacy infrastructure is becoming a sunk cost that's difficult to abandon but of dubious value. Substantial investments in hardware and software are in a similar boat, and they're becoming increasingly unnecessary capital expenditures eating into budgets that could be put toward AI and automation systems. A monolithic approach sabotages an organization's implementation efforts by stretching project timelines and delivery dates, potentially to the point where a completed automation project is no longer relevant to the business by the time it's delivered. A study commissioned by Kofax and conducted by Forrester found that 45% of enterprises attempted to avoid this by opting for ad hoc approaches to automation solutions involving siloed use cases and solutions from many vendors versus a holistic, integrated approach. Successfully implementing automation systems might never be "easy," but plenty of solutions and platforms have emerged to make the process as frictionless as possible for organizations with a wide variety of needs (and budgets). As you begin to construct your company's implementation road map, make sure you focus on the potential of the following three methodologies. 1. Automation-as-a-service model For organizations with existing (and ideally extensive) sources of data or input

information, automation-as-a-service solutions can offer the power of automation at a fraction of the cost. Automation-as-a-service comes in the form of a prebuilt solution, providing access to the latest automation tools and technologies with the flexibility, agility, and scalability of an as-a-service product. With the level of uncertainty that continues to pervade all kinds of industries, automation-as-a-service is a compelling way to reap the benefits of automation technology without incurring a potentially prohibitive upfront cost. 2. Role-based automation Role-based automation is essentially the creation of a digital colleague — an automated, AI-powered aide who can perform processes 70% faster at just 50% of the cost. These digital colleagues will not replace your current employees, but they can augment the capabilities of humans and perform the most mundane and repetitive tasks. Most workers (87%, according to Forrester) are fine with the idea of reskilling to work in conjunction with bots, and business leaders are excited by the prospect of a clear and easily measurable ROI. 3. Do-it-yourself platform What if your subject matter experts could automate some of the processes that they are responsible for without ever needing to involve an engineering team? Do-it-yourself automation platforms promise these capabilities, with a library or marketplace of available bots designed around automating certain specific business processes that "citizen developers" or ordinary employees can use without the need for any coding experience. These platforms can help organizations implement companywide automation at scale, without the need for an army of expensive developers and data scientists. There's no one-size-fits-all strategy to overcome automation obstacles, and the right solution is largely dictated by the maturity of the organization. That means CIOs will need to use a mix of different levers to achieve the desired results. An enterprise-wide approach is a great start, followed by an assessment of existing assets and the possibility of leveraging legacy infrastructure. Industry: Financial Services is one of the most challenging industries from a technology standpoint. Digital business transformation is now critical to the survival of virtually every organization, but effective change management must center on people. Stepping into a CIO's shoes is guite like being a parent, over and over again. Parenting doesn't always start when a child is born or adopted.

### Why Digital Transformation Is All About People

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and mentors might find it harder to do so when they don't share a physical workspace. That's why leaders must create learning opportunities and implement business structures that are less hierarchical in nature and encourage a problem-solving mindset. By adopting techniques such as gamified learning, for instance, leaders can promote collaboration and technical training in a fun, hands-on environment. And fun is important. A study from Osterman Research revealed that employees who found training interesting were 13 times more likely to say it impacted their thinking than those who found it boring. Companies like McDonald's, Deloitte, Nike, and other industry leaders have incorporated gamification strategies into their training programs. Fortunately, most of your employees are probably up for the challenge. Another Forrester report found that nearly 9 out of 10 knowledge workers were comfortable with the prospect of reskilling in order to work alongside digital counterparts. Change Starts Within To win in this new paradigm, leaders must put people at the center of organizational change management. Everyone in your company will have a unique perspective on where and how change must occur, and you'll need processes that facilitate effective collaboration and communication to ensure that the best ideas rise to the top. Moreover, you'll need to make sure that those involved in facilitating organizationwide change — including CIOs, CHROs, and everyone else in the C-suite — are equipped with the knowledge and skills they need in order to contribute in a meaningful way. Perhaps most important, you'll have to cultivate a mindset of innovation that extends beyond the C-suite and perhaps beyond borders, depending on the nature of your workforce. When employees understand why you're asking them to learn new skills and how their careers will benefit from the endeavor, change management becomes far easier for everyone. Whether it's difficult or seamless, change will inevitably impact your organization moving forward. Digital business transformation is now critical to the survival of virtually every organization, but it must be implemented properly to be effective. Putting people at the center of your change management strategy, and putting your employees in the position to learn in a collaborative environment, will give your digital transformation its best chance to succeed. To learn more about the role technology will play in tomorrow's workplace and the importance of people-centricity in digital transformation, download Wipro's State of Automation Report 2020. Industry: Mohanakrishnan P Global Head - Product and Practice, Wipro HOLMES® Mohan is responsible for product strategy and innovation, driving open innovation ecosystem, startup acceleration, and go-to-market strategy. He brings in a deep understanding of technology and has extensive experience of accelerating artificial intelligence capabilities. Over the years, he has donned hats of being a change agent, strategist, change management, and delivering transformation. Financial Services is one of the most challenging industries from a technology standpoint. Successfully implementing automation systems might never be "easy," but platforms and solutions have emerged to make it as frictionless as possible. Stepping into a CIO's shoes is guite like being a parent, over and over again. Parenting doesn't always start when a child is born or adopted.

### An intelligent and accelerated approach to ETL modernization

----- Arcticle source ----- https://www.wipro.com/blogs/charishma-narayan/anintelligent-and-accelerated-approach-to-etl-modernization/ ---- About The Author Contact Wipro Related Blogs AI Driving 5G Innovations for Communications Service Providers Making ML Models in Banking Resilient using Adversarial Attacks Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Please fill the required details to access the content An intelligent and accelerated approach to ETL modernization January | 2021 With ever-increasing demand for accurate and consistent data to power analytics, artificial intelligence (AI), and automation initiatives, organizations are quickly moving away from legacy systems towards a modern technology landscape. However, this is a time, cost, and resource intensive process and very often, likely to experience cost or time overruns. One of the most common contributors to these delays and spike in cost is the inability to accurately estimate the transformation/ modernization engagement, from an effort and timeline perspective. An additional factor is the lack of a simple way to manage the ETL estate and accelerate the upgrade/modernization initiatives. Some key guestions that developers need to be asking themselves include: Are the deadlines being met? Is the project on-track? Is engineering time spent more on existing processes than on building new ones? Often, the answers to these questions is in the affirmative, which unnecessarily prolongs the activity and probably might even derail it. What can help pull this together and ensure seamless execution of ETL upgrade/modernization programs is a bunch of features that promise reliability, automation and self-service capability. A comprehensive view of the ETL inventory is quintessential to proper planning. Analyzing and precisely determining job complexities keep the plan realistic and achievable. From an end user point of view, the ability to search for job designs and assess the attributes involved brings a sense of control. The automation employed to analyze source and target connectivity makes life a lot easier for ETL development teams. As customers are more open to embracing newer technologies, and given the growth and innovation in the data engineering landscape, there is a huge market potential for frameworks and accelerators that address these challenges seamlessly. The DataStage Analyzer, an accelerator from Wipro, helps customers in their DataStage upgrade/modernization through intelligent discovery and management of the DataStage ETL jobs inventory, leveraging rich and intuitive visualizations. This enables accurate and credible effort estimation

to execute cost effective and seamless DataStage ETL upgrade/ modernization initiatives. Organizations are now at an advantage when it comes to simplifying DataStage ETL inventory management. Accelerated due diligence/discovery, as part of the version upgrade/migration/ modernization initiatives, coupled with an intuitive visualization to better represent the ETL estate are the two most efficient outcomes of employing the accelerator. Industry: Charishma Narayan Platforms and Solutions Consultant - Data, Analytics & AI Charishma is helping businesses with their Data to Insights and Automation journeys, empowering them to become Intelligent Enterprises, through customization and implementation of Wipro's Data and Insights IP Accelerators. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. www.wipro.com/blogs/veni-mathew/ ---- Contact Wipro Blogs By Author Inclusion flourishes when diversity is embraced Please fill the required details to access the content Veni Mathew Veni Mathew Director - Human Resources, Wipro HR Services Along with steering the people priorities at Wipro HR Services, Veni also leads the Inclusion and Diversity agenda for the business. She brings a diverse experience of over 23 years spanning across Airline, hospitality, and ITES sectors. Veni has worn different hats during her tenure with Wipro, starting from Quality Black Belt to client delivery leader to her current HR role. In her spare time, Veni likes to read and spend time with her daughters. 64% of employees believe that diversity and inclusion make up a strong, decisive factor in accepting a job offer.

# Inclusion flourishes when diversity is embraced

---- Arcticle source ---- https://www.wipro.com/blogs/veni-mathew/inclusion-flourishes-when-diversity-is-embraced/ ---- About The Author Contact Wipro Please fill the required details to access the content Inclusion flourishes when diversity is embraced January | 2021 64% of employees believe that diversity and inclusion make up a strong, decisive factor in accepting job offer1. Despite this, the Wall Street Journal2 reported over 1 million violations of anti-discrimination laws registered with the Equal Employment Opportunity Commission or partner agencies in the last decade. Though organizations are consciously making stronger commitments for diversified and inclusive workplaces, some practices undermine the overall effort. A quick search got us these numbers: These biases hurt everybody. Although it

visibly hampers employee morale, workplace discrimination can cause organizations to lose up to \$64 billion annually8. So how can organizations work towards bringing parity, eliminating possible biases, and sustaining the diversity? While educating employees about possible workplace prejudices remains the focus of every diversity and inclusion (D&I) initiative; a little help from technology can help us get there. New-age technologies such as artificial intelligence (AI), robotics, and analytics can potentially eliminate bias at work. 1. Choose AI-powered bots to screen candidates, bias-free In the talent space, when designed and deployed well, AI can help mitigate the possible recruitment bias like the halo effect (where a single positive character trait influences the recruiter's overall judgment), the confirmation bias (when the recruiter uses the interview process to confirming his preconceived beliefs rather than getting to know the candidate), etc. Alpowered bots can be programmed to ignore demographic details and use data to support human decision-making. AI-enabled recruitment applications can help assess candidates on data points objectively — free from assumptions and mental fatique that a human recruiter may be susceptible to. 2. Use augmented writing to create inclusive job descriptions Augmented writing can easily highlight gender-specific vocabulary and help human recruiter curate more inclusive job descriptions. 3. Let algorithms limit human interference in the hiring process Organizations are also employing machine learning (ML) algorithms to screen resumes, shortlist candidates, and rank them relatively. These intelligent algorithms can help automate activities like scheduling interviews, rounding up feedback, and following up with applicants, ultimately freeing staff for more strategic tasks and improving cost-per-hire. 4. Leverage NLP to identity possible virtual prejudices Not just hiring bias, AI can also help identify the possible workplace prejudices during online interactions. Advanced Natural Language Processing 10 (NLP) can track word usage and create a profile of their potential level of prejudice, anger, and aggression. Doing this can help organizations detect unfavorable behavior and take steps to rectify/ eliminate it organically. 5. Encourage a bias-free performance evaluation with analytics, dashboards etc. Lack of recognition and unfair performance evaluation are among the many reasons good employees jump the ship11. Analytics, real-time dashboards, and CFR procedures can help counter performance bias. Organizations can implement performance management software that illustrates Objectives and Key Results12 (OKR) and automatically recommends improvement plans and action items to support all employees—equally. The interactive dashboard acts as a common ground between employees and their managers to discuss their performance evaluation criteria through comments/chat support. The perfect performance management tool can be integrated with the organization's Learning Management System (LMS) to help employees overcome their skill deficit. Bias-awareness is important Employees need to be aware of possible biases that stem from their un/conscious mindset. This is why fostering a bias-free culture that pivots on encouraging diversity, ensuring transparency, and embracing the value of the experience of employees from all walks of life is critical for success. Employees need to undergo frequent bias-awareness training. These trainings will enable them to identify biases (conscious/unconscious) and correct themselves with the help of module learning and assistance from behavioral experts and diversity trainers. The journey begins with us While attempting to handle explicit prejudice at

work, organizations must pay attention to more implicit biases as well. These cognitive prejudices, especially less overt, might have an insidious negative impact on employees' mental health and professional growth. Owing to my work association with diversity and inclusion, I have witnessed the impact that leaders can have on enabling inclusion at workplace. Leaders must encourage employees to work in diverse groups. Policy makers and people leaders should brainstorm on ideas that help integrate underrepresented employees into the social fabric. While communicating the code of conduct to employees, organizations need to share details of the forum/team/group they can reach up to report any such event. Periodic surveys on non-discriminatory polices should be conducted. I personally evaluate the success of a diversity model against the feedback shared by my colleagues. This can be a great start for you too. If the work environment is constructed to optimize the employment outcomes of an employee without considering factors like age, weight, political preference, sexual alignment, race, ethnicity — it would create a better demographic of our world of work. I hope all of us do our bit to enable, embrace, and encourage workforce plurality. References Veni Mathew Director - Human Resources, Wipro HR Services Along with steering the people priorities at Wipro HR Services, Veni also leads the Inclusion and Diversity agenda for the business. She brings a diverse experience of over 23 years spanning across Airline, hospitality, and ITES sectors. Veni has worn different hats during her tenure with Wipro, starting from Quality Black Belt to client delivery leader to her current HR role. In her spare time, Veni likes to read Arcticle source ---- https://www.wipro.com/blogs/krishnakumar-n-menon/ -----Contact Wipro Blogs By Author How blockchain can hack-proof a supply chain Please fill the required details to access the content Krishnakumar N Menon Krishnakumar N Menon Vice President, Service Transformation and Blockchain NKK is Vice President of Service Transformation and Blockchain. having led various units at Wipro for nearly two decades. It's every company's worst nightmare. In 2019, a global metals manufacturer experienced a ransom-ware attack in which hackers seized and encrypted its computer files, then demanded payment to unlock them.

www.wipro.com/blogs/krishnakumar-n-menon/how-blockchain-can-hackproof-a-supply-chain/ ---- About the Author Contact Wipro Please fill the required details to access the content How blockchain can hack-proof a supply chain January | 2021 It's every company's worst nightmare. In 2019, a global metals manufacturer experienced a ransom-ware attack in which hackers seized and encrypted its computer files, then demanded payment to unlock them. All 35,00 employees in 40 countries were affected. (The CFO could not even turn on his desktop computer.) Some production lines shut down; others shifted from computer to manual operations. Although the company ultimately resolved the crisis without paying ransom, the disruption ultimately cost it about \$71 million, along with significant reputational harm. Unfortunately, companies are at an increased risk of these kinds of breaches. The diffusion of technology has resulted in attackers gaining state-of-the-art skills, thus increasing the sophistication of their attacks. Suppliers are a key point of access. As supply chains become more fragmented and digitized, they create new points of vulnerability. Each interface among a supplier, company, and customer represents a point

where a hacker can steal data, introduce malware, or create some other havoc. With more devices getting deployed across supply chains, data is increasingly gathered by devices that have very basic memory and computation power — for example, point-of-sale terminals — and are difficult to secure. Some of the most high-profile attacks recently have exploited these vulnerabilities. The challenge of supplier visibility is growing. One recent survey of more than 1,500 CIOs, CISOs, and chief procurement offices from five major economies found that 77% reported limited visibility into third-party vendors. More ominous, 80% had experienced an info-security breach through a third-party vendor in the past 12 months. Another analysis found that 300 supply chains experienced a data breach in 2019, with ransomware attacks being the most common. The direct damage caused by cyberattacks is just part of the problem; the scrutiny from regulators, and potential penalties of inadequate measures for resisting attack, is of real concern too. Yet there is a means by which companies can create more secure supply chains and prevent the growing incidence of cybercrime: blockchain. The benefits of blockchain In a traditional database, a "master" set of information is stored at a central location and distributed to other participants (e.g. how most banks store transaction histories, or how companies track inventory). By contrast, blockchain is essentially a distributed database in which all information is updated, encrypted, and maintained at each "node" (or participant) on the chain. The traditional approach may be easy for organizations to store and maintain records, but its single point of access introduces serious security concerns. If a hacker gets access, the entire database can be compromised. Several aspects make blockchain hacker-proof. First, the data is timestamped and immutable. Participants can't change any information in the chain - they can only add to that information. In addition, because data is updated in real-time, any attempt to tamper with it in one node will automatically be flagged at all nodes. Second, the data is encrypted. Third, participants can be verified through digital credentials to control different levels of access, with a public key infrastructure noting which specific user(s) or IoT devices accessed or transacted with the data. Evolving applications and features The range of applications is guickly growing, with security at the heart of many use cases. Blockchain helps track diamonds from the mine to the finished gem. It helps automotive manufacturers track genuine parts through their supply chain. It enables companies to validate how and when specific services are completed. Enterprises can even use blockchain to register the qualifications and license of suppliers to ensure processes met compliance requirements. Yet blockchain is not a single, homogenous system that allows organizations to flip a switch and capture benefits. It's evolving rapidly, with new features added regularly to stay ahead of emerging threats. For example, Wipro is working with Intel on a platform called Hyperledger Avalon that will allow companies to stream data into it securely from outside a particular blockchain. Similarly, smart computing enables some transactions to be processed automatically through the chain. For example, when a shipment is received at a loading dock, a payment can be automatically generated and entered into the chain so Accounts Payable does not need to handle it manually. How to get started Blockchain doesn't require any upgrades to the existing IT infrastructure. However, it does require some other considerations. To that end, companies looking to apply blockchain to their supply chain should begin with these

three steps. Start small. Creating a blockchain for the entire supply chain is daunting, and it requires an ecosystem approach; it can't be done by a single organization. For that reason, companies should start with a project that is limited in scope. Pick a specific product line or — even better — a trusted partner, and launch a pilot for that specific relationship. As the supplier and the company build their capabilities over time, they can look to expand to other participants in the supply chain. Expand to other participants. Once a trusted partner has been found and the first proof-ofconcept completed, organizations can analyze the benefits and ROI they generated. This will help build momentum for the team and secure a green light from management to start expanding the ecosystem to other participants. As part of this expansion, the founding members will need to capture and incorporate the requirements, expectations, and suggestions of the newer members. Establish the right governance and incentives. As multiple organizations join the network, it becomes even more critical to ensure that every organization has a say in the network's operations and evolution. Participants will need to build a robust governance framework for the ecosystem to function and grow efficiently. Incentives are another crucial component. Once a critical mass is achieved, it is important to ensure that participants realize the benefits of their investments and remain in the network. The right incentive structure will ensure that the ecosystem can sustain itself and continue to attract new members. As supply chains have become more digitized, globalized, and fragmented, they've introduced new vulnerabilities for many companies. The growing reliance on data means hackers can do a tremendous amount of damage if they gain access. Blockchain offers a way to fight back by hacker-proofing a supply chain. With the technology still in its early stages, forward-looking organizations can give themselves an advantage by implementing blockchain. In fact, as the risks of a hack grow, the consequences for companies that don't take steps to protect their supply chain rise in tandem. Blockchain is an increasingly available tool. Companies need to take the impetus to start Krishnakumar N Menon Vice President, Service Transformation using it. and Blockchain NKK is Vice President of Service Transformation and Blockchain, having led various units at Wipro for nearly two decades. www.wipro.com/blogs/lasse-underbjerg/ ----- Contact Wipro Blogs By Author Five Ingredients for More Valuable Innovation Please fill the required details to access the content Lasse Underbjerg Lasse Underbjerg Global Future Lab Director, Designit Lasse is a thinker, maker and speaker. A futurist hybrid creative with more than 15 years of award-winning consultancy experience across sectors, competencies and across the globe. Lasse is passionate about exploring what's next, with relentless curiosity, empathy and strategy. Envisioning diverse futures and solving human problems at the intersection of design and technology. Inventing simple solutions and co-creating compelling experiences. Making things people want, moving minds and moving markets. There's no magic formula for adopting an innovative futures mindset, but five ingredients can put organisations on the right path.

#### Five Ingredients for More Valuable Innovation

----- Arcticle source ----- https://www.wipro.com/blogs/lasse-underbjerg/fiveingredients-for-more-valuable-innovation/ ---- About the Author Contact Wipro Please fill the required details to access the content Five Ingredients for More Valuable Innovation January | 2021 For the past two decades, much has been made of "open innovation," the concept of actively working outside the organisation's four walls to spark new ideas. Yet even though the business case for innovation has never been stronger, companies today still don't innovate enough, and they derive limited value from their creativity. In a world where change is the only constant, how can enterprises nurture and embed a futurist culture into their way of working to create impactful innovations? It's tempting to focus on the current market conditions, but organisations that look forward consistently perform better. A study cited in the Harvard Business Review found that firms with a long-term perspective significantly outperform short-term-minded firms after crises, increasing their market cap by 58%. Another study found that "futureprepared companies outperformed the average company with 33% higher profitability and 200% higher growth." Companies that succeed are those that adopt an agile, iterative approach to innovation. In a continually changing world, we crave simplicity, yet the future is complex. The best way to navigate this complexity and uncertainty is through prototyping new futures. By combining innovation with future thinking, businesses can accelerate their organisation's innovation and move from 'what now' to 'what's next'. There's no magic formula for adopting an innovative futures mindset, but five ingredients can put organisations on the right path. 1. Make it diverse If looking into the future were easy, everyone would do it. To truly begin discovering new opportunities, there must be a willingness to celebrate diversity in backgrounds, beliefs, and ideas. According to McKinsey, companies in the top-quartile for their executive team's ethnic/ cultural diversity were 33% more likely to have industry-leading profitability and 27% more likely to have superior value creation. Companies must be willing to explore, uncover, and probe many different futures - including ones that seem irrelevant, unlikely, or wrong. Diversity in teams and thinking allows businesses to deal with the uncertainty of looking ahead. Leaders should ask: What different perspectives are included? 2. Make it participatory An innovator's role is not to come up with the final answer. Instead, it is to facilitate participation, inclusivity, and collaboration. Breaking internal silos and facilitating co-creation with broader ecosystems are vital for defining futures. McKinsey found that "highly inclusive organisations generate 1.4 times more revenue and are 120% more capable of meeting financial targets. Inclusive organisations are also 1.8 times more likely to be change-ready and 1.7 times more likely to be innovation leaders in their market." When companies democratise creativity and decision making, they create futures that are not limited to the minds of a few but to the imagination of many. A participatory innovation process increases the likelihood that the futures have broader relevance. Leaders should ask:

Whose future needs are being addressed? 3. Make it tangible Tangible prototypes are a catalyst for change. Through combining technology and design, prototypes can exemplify complex topics, create shared understanding, provide a clear direction, and spark informed discussions. Organisations should embrace visionary and concrete prototyping to avoid the common pitfalls of misguided innovation. More than 40% of start-ups die because no one wanted what they built, and large corporations invest millions in 'innovation initiatives' that end up forgotten by year-end. Few have the desire or time to read a 200-page report. However, just like a sci-fi film, a tangible prototype provides multimodal experiences that are easier to understand, relate to, and evaluate. Leaders should ask: How do we make the future concrete, relatable and relevant? 4. Make it continuous The most disruptive innovations are not sudden epiphanies, but rather a discovery amid a continuous innovation process. Businesses need a collaborative culture, an open mindset and a high level of trust, to create a safe space for vulnerable, early ideas to flourish. Embrace iterative processes. Be willing to experiment and have fun. Acknowledge dependencies but dare to go rogue. We can all agree that most innovations fail. But those that succeed are worth fighting for, as they can genuinely drive radical change. Leaders should ask: How do we get a commitment to iterative processes? 5. Make it matter Technology forces us to continually adapt to an accelerating world. In this vortex of change, our own (and our customers') search for meaning has never been greater. Innovations are expected to be sustainable and provide a smooth customer experience through speedy, convenient service. Yet convenience should be weighed against broader (and potentially unintended) implications, and whether the innovation delivers meaning. A Harvard EY Beacon Institute survey found that "companies with a strong sense of purpose are able to transform and innovate better." A separate study found that 53% of executives at companies with a strong sense of purpose said they successfully drive innovation and transformation efforts, compared to only 19% who reported success at companies that had not thought about purpose. Leaders should ask: How can we create positive value for people, planet, and profit? Mixing the Five Ingredients When we look ahead, change is the only constant. But from a crisis arises creativity: novel ideas and new mental models. To generate the most value from innovation and future thinking, companies must remember to make it diverse, participatory, tangible, continuous, and meaningful. Creating value by marrying innovation and future thinking is not as easy as flipping a switch, but mixing those five ingredients empowers companies to shift their thinking from wondering 'what now?' to imagining 'what's next'. Lasse Underbjerg Global Future Lab Director, Designit Lasse is a thinker, maker and speaker. A futurist hybrid creative with more than 15 years of awardwinning consultancy experience across sectors, competencies and across the globe. Lasse is passionate about exploring what's next, with relentless curiosity, empathy and strategy. Envisioning diverse futures and solving human problems at the intersection of design and technology. Inventing simple solutions and co-creating compelling experiences. Making things people want, moving minds and moving markets.

 Harmeet provides leadership to Wipro's Industrial and Engineering Services business on global basis, providing counsel to a portfolio that includes IoT, Industry 4.0 (Smart Manufacturing) and Engineering Services.

### Using IoT to Create an Intelligent Enterprise

---- Arcticle source ---- https://www.wipro.com/blogs/harmeet-chauhan/ using-iot-to-create-an-intelligent-enterprise/ ---- About The Author(s) Contact Wipro Please fill the required details to access the content Using IoT to Create an Intelligent Enterprise February | 2021 As management guru Peter Drucker once said, "What gets measured, gets managed." Unfortunately, many companies have struggled to apply that principle to their Internet of Things (IoT)-enabled digital transformation programs. In theory, IoT should allow companies to collect and track data across all of their critical business processes, operations, and even products in use by customers in the field. In reality, most companies are still using IoT to track individual assets and devices, often through a case-by-case, isolated approach that yields marginal benefits at best. They may have embedded sensors in a manufacturing facility, or on a company's fleet of vehicles, and they're able to generate data—sometimes significant amounts—but they're not able to synthesize that information into genuine insights or make nearreal-time decisions. They're not measuring enough, and they're not integrating that information with other data. Instead, organizations should link IoT-enabled devices, assets, and processes as part of a holistic digital transformation—not just intelligent sensors and devices and siloed applications but information from all internal operations, business models, and customer-facing aspects. That stream of data gets aggregated on a central, enterprise-wide platform, powered by a back-end analytical engine empowered with artificial intelligence and machine learning. In that way, managers and the C-suite can have real transparency into what's actually happening across the organization, at a highly granular level. As a result, they are better equipped to execute against strategic objectives like increasing operational efficiency, improving customer service, Improving product design and reliability, or rethinking the business model. They can take corrective actions much faster. Moreover, predictive analytics can use this data to give mangers and leaders a sense of what's coming, allowing them to take proactive steps to capitalize. And in many cases, those corrective actions can happen autonomously. In other words, companies need to imbue IoT with intelligence. To consider the potential gains from this approach, consider a large Industrial pump manufacturer. The company incorporated IoT across several of its production facilities into an integrated analytics platform. Through this platform, the company was able to implement real-time predictive maintenance, increasing both asset and network utilization. It reduced maintenance costs by 25% and improved overall production capacity by 5%, even as it generated significant environmental gains (avoiding 665,000 tons of CO2 emissions per year). Productivity and profitability both improved, and the company was able to

grow its service offerings to boost sales. Four priorities to get there To create this kind of intelligent enterprise capitalizing on the strengths of IoT, companies should focus on four priorities. Many organizations are, understandably, dissatisfied with their IoT initiatives thus far. But rather than being written-off as failures, those efforts should be treated as the foundation on which companies can now build and grow. Truly capturing the benefits of IoT calls for a broader and more comprehensive approach, one that helps companies achieve their goal of becoming an intelligent Harmeet Chauhan Senior Vice President, Industrial & Engineering Services Harmeet provides leadership to Wipro's Industrial and Engineering Services business on global basis, providing counsel to a portfolio that includes IoT, Industry 4.0 (Smart Manufacturing) and Engineering Services. Santhosh Madathil Global Head - IoT Practice Santhosh leads a team of Architects and Technologists developing IOT Reference solutions addressing the entire technology stack - from Sensors, Edge and Platform to Analytics, AI, and backend applications - for various industry segments. ==============

#### **Sreekanth Nyamars**

#### Kubernetes Native Design Thinking: Realizing true multicloud adoption

----- Arcticle source ----- https://www.wipro.com/blogs/sreekanth-nyamars/ kubernetes-native-design-thinking-realizing-true-multi-cloud-adoption/ -----About the Author Contact Wipro Related Blogs Sustainability and Resilience with Open Source: A Natural Fit What Success in the Next Normal Looks Like The 5 Business Trends Shaping the Next Normal Please fill the required details to access the content Kubernetes Native Design Thinking: Realizing true multi-cloud adoption July | 2019 Enterprises are embracing cloud native thinking as one of the strategic principles in their digital transformation journeys, and they are now extending this concept of a cloud first strategy to embrace a multi-cloud deployment model where workloads are seamlessly managed across multiple cloud provider platforms. While multi-cloud adoption offers interesting business benefits, ranging from cost savings to providing high availability and uninterrupted business continuity; it also introduces complexities in terms of package compatibilities, deployment and service dependencies. However, with almost all the public cloud providers offering some form of Kubernetes support, multi-cloud adoption has become a truly realistic model today, provided the services are designed to leverage Kubernetes as the underlying orchestration platform. In this article, we

focus on this very thought process called Kubernetes Native design thinking. It is a design philosophy with Kubernetes as the de-facto underlying foundation block on which solutions are deployed. While the cloud native design principles work perfectly in a single cloud setup, seamless deployment of these services across multi-cloud infrastructure offers several challenges, especially in case of cloud-provider agnostic solutions. To be fully cloud provider agnostic, we need to revisit deployment aspects of the cloud native services. Key challenges with migration of services across cloud providers are: By following Kubernetes native design thinking, we can overcome these challenges to seamlessly migrate services across clouds. We can decouple the services from cloud provider dependencies and ensure that migration of services across clouds is seamless and less time consuming. Let us look at some key design aspects to be considered while adopting Kubernetes native design approach: Conclusion: Cloud native designs enable services to be cloud ready. Kubernetes native design thinking will enable enterprises to migrate services with minimum impact and efforts while maximizing the benefits of multi-cloud deployment model. It helps abstract inherent cloud provider dependencies so that true multi-cloud adoption is possible and enterprises can realize business benefits, such as enhanced business continuity, reduced cost of ownership, reduced vendor dependency, improved scaling, etc. References: Industry: Sreekanth Nyamars Head, Platform Engineering, Open Source Practice, Wipro. Sreekanth Nyamars leads the Open Source platform engineering team at Wipro. He is involved in numerous large scale implementations of payment platforms in banking and service delivery platforms in telcos, and provides technology advisory services to customers involved in adopting multi-cloud initiatives. His areas of expertise include Kubernetes, Cloud Native DevOps and building innovative solutions using Open Source container technologies. He is a senior member of Distinguished Member of Technical Staff. He is also a CNCF Certified Kubernetes Administrator (CKA). The world is leveraging open source to drive innovation. But, what to do if you can't open source? Inner source. Here's how companies' relationships with their customers, workforces, and supply chains will change as they adapt holistically to the new normal post-COVID. Several consumer and business trends will converge to shape the post-pandemic business world, but agility and digital Arcticle source ---- https://www.wipro.com/blogs/deviprasad-rambhatla/ -----Contact Wipro Blogs By Author The Retail Revolution: What should retailers focus on? Please fill the required details to access the content Deviprasad Rambhatla Deviprasad Rambhatla Senior Vice President of Retail, Services, Distribution and Transportation, Wipro Deviprasad Rambhatla, who goes by Devi, leads Wipro's Retail, Services, Distribution and Transportation business unit. His responsibilities include strategy, business growth, customer satisfaction, employee satisfaction, and P&L management. Devi, a diehard Wiproite, is no stranger to the wonderful world of transportation and distribution. Devi's career started at GE Transportation Systems, where he gained in-depth and personal experience in several US and Canadian railroads. In his role as Global Head of HTTP, Devi spearheaded Wipro's 25% CAGR growth in this vertical by bringing in segment-wise focus in Travel, Transportation, Hospitality, and Public Sector. Devi has been spearheading growth through blue ocean strategy, the opening up of white spaces, investing in and co-innovating IP/platforms, and harnessing the

might of the new age of Wipro to meet the changing needs of customers. He has expanded Wipro's repertoire of services from being cost-saving services to ones that significantly help customers bring in newer revenue streams and enhance customer experiences. Devi holds a bachelor's degree in computer science and systems engineering. He also attended the Wharton School of Business for his diploma in client engagement. On August 3, we hosted a panel discussion with Avasant Principle Shirin Alipanah, Wipro VP and Global Head Deviprasad Rambhatla, Bumble Bee Foods CIO Tony Costa, and Columbia Sportswear & Avasant Distinguished Fellow Fred Pond.

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### The Retail Revolution: What should retailers focus on?

----- Arcticle source ----- https://www.wipro.com/blogs/deviprasad-rambhatla/ the-retail-revolution-what-should-retailers-focus-on/----- Contact Wipro Please fill the required details to access the content The Retail Revolution: What should retailers focus on? October | 2021 On August 3, we hosted a panel discussion with Avasant Principle Shirin Alipanah, Wipro VP and Global Head Deviprasad Rambhatla, Bumble Bee Foods CIO Tony Costa, and Columbia Sportswear & Avasant Distinguished Fellow Fred Pond. The panelists had an opportunity to present their own unique points of view and insights gleaned from their real-world experiences and the stories that drove them. The retail transformation has undeniably been accelerated by the COVID-19 pandemic. Essential retail like grocery, e-commerce, and home improvement became flush with the resources they needed to drive their next set of initiatives while other "non-essential" segments found that they had to fight even harder to get customer attention. The focus also shifted to health, safety, and trust. In short, the bar grew even higher for retail customers and retailers had to meet that standard without being able to charge more to do so. Brick-and-mortar? The news isn't all bad, however. COVID-19 has also become the biggest driver of innovation and change in the history of retail. Prior to the pandemic, the brick-and-mortar store was the center of most retailers' strategie but Amazon was already putting the pressure on. Now that physical stores have bounced back, the future of retail is on everyone's mind. Which COVID-19-induced trends are here to stay? Is it the modernization of stores for buy online/pick-up in store, buy online/return to store, or curb-side pickup? Touchless payments, mobile and up-sale opportunities, better consumer/customer experiences with more personalization and training? With selling space inside the store growing smaller alongside the growth of omnichannel, retailers are finding that they need to deliver more experience in the front of the store even though they are getting smaller. At the same time, customers are demanding more engagement and newer experiences such as touchless checkouts, endless aisles, AR/VR experiences, and digital tools in-store without a willingness to pay for these experiences. At the same time, the back of the store is getting bigger as stores try to use their physical locations as fulfillment centers that can compete in an "Amazon world" and automation is becoming increasingly important. It's crucial to note that brick-and-mortar stores have not only not

gone away, but have played a key role in survival for businesses in the pandemic; even Amazon has been opening up retail outlets. "The store of the future will be measured on efficiency and convenience and for that technology is very, very important," according to Deviprasad. "Stores will become very relevant in a different avatar." An omnichannel approach To compete in the post-COVID world, retailers need digital processes that are capable of creating the types of personalized experiences that customers are craving. To do this, they need to reimagine their supply chains to account for changing customer behaviors as well as a more agile, productive, and flexible workforce. The only real channel that the customer understands is the channel of experience, according to Deviprasad. When stores look at experience as the only channel, their decisions become easier and more clear. For this to happen, retailers need to be flexible, react in real-time to market and consumer trends, and offer consistent brand experiences across all of their touchpoints. Digital services such as curbside and third-party delivery implementations, data and analytics, and supply chain solutions can help companies get there and, in turn, experience leads to customer loyalty and retention. Unsung heroes Retail associates continue to bear the brunt of the lack of investment in core areas. Complicated systems and processes, lack of training, and outdated methods of engagement. Associates need the tools for better outcomes in addition to new opportunities for advancement. They must now bridge the two worlds of efficiency and convenience, and need to be cross skilled and well-trained for more seamless transactions. Cybersecurity The damage from cyber breaches has never been higher. At the same time, consumer expectations for retailers to protect their data are just as high. Consumers expect that retailers will allow opt-in and opt-out of sharing and using their data for personalization and marketing. Retailers must acknowledge and manage these boundaries to be successful. Customers need to feel safe and secure as much as they need a great digital experience. As in any relationship, businesses that focus on customers' needs instead of their own gain a differentiating edge and brand loyalty. Industry: Deviprasad Rambhatla Senior Vice President of Retail, Services, Distribution and Transportation, Wipro Deviprasad Rambhatla, who goes by Devi, leads Wipro's Retail, Services, Distribution and Transportation business unit. His responsibilities include strategy, business growth, customer satisfaction, employee satisfaction, and P&L management. Devi, a diehard Wiproite, is no stranger to the wonderful world of transportation and distribution. Devi's career started at GE Transportation Systems, where he gained in-depth and personal experience in several US and Canadian railroads. In his role as Global Head of HTTP, Devi spearheaded Wipro's 25% CAGR growth in this vertical by bringing in segment-wise focus in Travel, Transportation, Hospitality, and Public Sector. Devi has been spearheading growth through blue ocean strategy, the opening up of white spaces, investing in and co-innovating IP/platforms, and harnessing the might of the new age of Wipro to meet the changing needs of customers. He has expanded Wipro's repertoire of services from being cost-saving services to ones that significantly help customers bring in newer revenue streams and enhance customer experiences. Devi holds a bachelor's degree in computer science and systems engineering. He also attended the Wharton School of Business for his diploma in client engagement.

 what does it take to build Autonomous Systems? Please fill the required details to access the content Jayanta Dey Jayanta Dey Vice President Global Head of Consulting, Solution and Practice Unit for the Telecom Equipment Vendor Vertical, Wipro Limited Jayanta Dev is currently Vice President for Wipro's telecom equipment vendor business unit where he heads the Consulting, Solutions and Practice unit. Jayanta has over 23 years' experience in the telecommunication industry. His area of specialty includes fault tolerant operating system, network and service management and wireless technologies. Jayanta has earlier held various roles in Wipro as Global Head of Sales and responsible for building strategic partnerships with telecom clients in USA and Europe. He was also the Business Head for Wipro's Wireless Network services. Jayanta has represented Wipro in various industry forums like OSS/J. He is currently responsible for some of the innovative solution that Wipro is building for the telecom market and that includes LTE Small Cell and LTE Lightweight Packet Core. He is involved in providing advisory services to various telecom clients on their product strategy and roadmap, process optimization, strategy for service roll out and on innovative out-sourcing/partnerships models. Jayanta holds a BE (Hons) Electronics Engineering from BITS Pilani and a MBA from North Eastern University Boston. Jayanta is currently based in Bangalore, INDIA. Chandrayaan 2, India's lunar exploration mission, has captured our minds 

### So what does it take to build Autonomous Systems?

----- Arcticle source ----- https://www.wipro.com/blogs/jayanta-dey/so-whatdoes-it-take-to-build-autonomous-systems/ ---- About the Author Contact Wipro Related Blogs Connectivity and Interoperability: Realizing the Full Potential of Comprehensive IoT Solutions Strategic Partnerships Will Drive 5G Success for Communications Service Providers Using IoT to Create an Intelligent Enterprise Please fill the required details to access the content So what does it take to build Autonomous Systems? December | 2019 Chandrayaan 2, India's lunar exploration mission, has captured our minds and hearts in the last few months. The mission was ambitious as India is only the fourth country in the world to attempt a soft landing on the moon. Russia, USA and China are the three other countries that have been successful in this mission before. Chandrayaan 2 was also the first mission in the world to attempt a landing on the south pole of the moon. A billion people waited with patience, anticipation and anxiety well past mid night for this historic event to unfold. There were moments of joy as the moon lander Vikram successfully separated from Chandrayaan 2 orbiter and started its descent in 'autonomous mode' to the surface of the moon. Unfortunately, the mission was not entirely successful as we lost communication with Vikram when it was 2.1 Km above the moon's surface. The nation was disappointed but united in its support for the brilliant scientists of ISRO (Indian Space Research Organization) who selflessly and tirelessly worked for the last few years on this ambitious project. As the events of the last few days unfolded, I could not help but draw parallels with the making of WiPOD, Wipro's

reference platform for an autonomous campus car. Many of you would have seen WiPOD in action in our Electronic City campus. Both WiPOD and Vikram are complex closed loop autonomous systems that operate in realtime to deal with the dynamic surrounding environment. There are important lessons that we can learn from both on what it takes to build these autonomous systems. Before I proceed further, let me first clarify that Vikram has a much higher order of complexity compared to WiPOD and some of them are listed below:- It will take several weeks if not months for ISRO scientists to analyze the telemetry data and images of Vikram from Chandrayaan 2, and determine the root cause of what went wrong in the 'last mile'. It would be unfair to hazard a guess on the cause of failure. Hence, I am sharing with you the multiple lessons that we learnt during our 18-month journey of building WiPOD with the sole objective of what it takes to engineer autonomous systems. Following are some of the key lessons learnt: Autonomous systems is an active area of research for me during my spare time and so if any of you are interested, please reach out to me to share your thoughts, insights and innovative ideas. I would love to hear back from you and have a deeper discussion on this fascinating topic. Industry: Iavanta Dey Vice President and Business Head, NEPC Vertical - Tech BU Jayanta is responsible for CTO initiatives for the Technology Business Unit on emerging themes like 5G, AI and Cloud Native. He has over 30 years' experience in the Telecommunication industry. He holds a BE (Hons) Electronics Engineering from BITS Pilani and an MBA from Northeastern University, Boston. He can be reached at jayanta.dey@wipro.com To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. CSPs are looking to the enterprise (business-to-business) segment to help monetize their investments in 5G. As management guru Peter Drucker once said, "What gets measured, gets https://www.wipro.com/blogs/mandar-vanarse/ ----- Author's Posts Contact Wipro Please fill the required details to access the content Mandar Vanarse Mandar Vanarse General Manager and Head - IP & Business Solutions, Wipro Mandar is a digital transformation and innovation leader, design thinker, and strategy coach with 26 years of industry experience. He is the author of ASSIMPLER Framework for Enterprise Architecture / IT strategy, which has been implemented by various enterprises and governments. Mandar's expertise includes product development lifecycle and IP creation. He has worked with Product Engineering Services organizations to design and develop world-class products having global footprint. He has designed architectural design patterns and frameworks to address chronic architectural challenges and business problems. Mandar's domain knowledge spans across various industry segments including Banking, Government, Health, Manufacturing, Communications and Oil & Gas. Reach out to GT office at Wipro to contact Mandar.

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#### Innovation - Not a Solo Game Anymore

----- Arcticle source ----- https://www.wipro.com/blogs/mandar-vanarse/ innovation-not-a-solo-game-anymore/ ---- About the Author(s) Contact Wipro Please fill the required details to access the content Innovation - Not a Solo Game Anymore April | 2021 If you look at the evolution of humans, it is a perpetual journey of innovation. The early roots of stone tool innovation date back to more than 300,000 years ago. Researchers argue that these evolutionary changes coincided with a prolonged period of strong climatic and landscape change. Juxtaposing this historical perspective with the current scenario that is marred by uncertainties like a global pandemic, climate change and depleting natural resources, we unearth a few important realizations that can be applied to today's businesses. Those are - An ideal example that brings these realizations to life is the Coronavirus pandemic. The scale of the pandemic is such that expanding the reach of medical infrastructure is an existential need and no country on the planet is exempt from doing so. The crisis accelerated innovation to such an extent that something like a vaccine which took decades to develop earlier, was now ready within 6-12 months with reasonable efficacy. Portable ventilators are also great examples of how collaboration between academia, pharmaceutical companies, medical device manufacturers, and supply chain companies accelerated the time to market to scale these innovations and in making them available globally. Rising market expectations for innovation from enterprises Supply chains across the world were constrained by the sudden fall in demands forced by the lockdowns across the globe in 2020. Suddenly, they're now being forced to restore services at higher efficiencies than before the pandemic to address the shortage in critical healthcare equipment, medicines, personal protective gears, and oxygen during the second wave of COVID. The complexities of vaccine transportation through secure cold chains is an added responsibility on the supply chain enterprises. Contactless delivery is a growing demand from eCommerce and Food Delivery organizations. Domino's is rolling out a robot car delivery service to select customers in Houston by partnering with a start-up. Amazon has already completed pilots for its drone delivery service for small packages. Even in the highly sensitive Banking domain, customers have adapted quickly to the new ways of living, and touchless banking is a part of this new normal. Forbes has reported that the overall usage of contactless payments in U.S. has risen 150% since March 2019. In fact, even before the pandemic, USA online banking statistics showed that 80% of Americans would rather bank digitally than visit a brick-and-mortar branch. The change in consumer behavior is a long-term phenomenon and banks need to quickly move towards digital banking, lending and payments business models. Today, large organizations are looking at remote working not just as a stopgap arrangement, but as a long-term strategy even after the pandemic recedes. They need to quickly ramp up their remote working infrastructure that is built for a small number of employees and prepare it for seamless access to thousands of employees. Rising enterprise expectations for

innovation from technology partners These consumer-driven trends signify that innovation can no longer simply be a guiding principle of organizational strategy. It is rather a means of sustenance and a harbinger of growth for enterprises that will thrive in future. The shift towards an autonomous future led by enterprise automation and faster adoption of AI and digital technologies is common in almost all industries. The stress that industries have gone through due to the pandemic has only catalyzed this shift. Businesses are expecting technologies like cloud, AI, AR/VR, IoT, robotics, autonomous systems and blockchain to show ROI at 10X the speed in 1/3rd the time. This coupled with an accelerated focus on sustainability, equality and diversity, localization, and the need to make enterprises resilient to future disruptions and safe for employees has made it imperative for today's enterprises to have a concerted strategy around innovation. A significant decrease in the lead-time to bring innovations to the market will foster a culture of co-innovation with multiple partners across the value chains, and this will be the business strategy of the future. Sharing investments, IP rights and revenue to accelerate innovation is a reality now, while the gig economy is becoming the new global workforce. Synergize to catalyze innovation Organizations are no longer looking for System Integrators, but partners who can power their innovation journey and make it a reality. This emphasizes the need for an outside-in approach by technology partners. They need to focus on the 'What' aspect first, and then figure the 'How', rather than designing 'How' and losing sight of 'What'. Understanding the need of their customers' customers and the challenges that enterprises are facing in addressing those needs is the first step towards becoming valued partners. They need to identify patterns and think about building repeatable domain or horizontal technology solutions. Enterprises need 'business solutions' that are capable of radically transforming their business processes, models and consumer experiences at scale. They need solutions that can guickly modernize their IT landscapes, and are capable of helping them transcend into connected and intelligent enterprises by leveraging technologies like AI, IoT, 5G, data analytics, autonomous systems and blockchain, and solutions that can ensure trust by addressing the changes in the security, privacy and regulatory landscapes globally. These business solutions can essentially be integrated offerings that cover the whole nine yards of business, process, and technology transformation. They can be composites that have IP-based assets at their core and are packaged along with people-based expertise, capabilities from partners or start-ups, and are targeted to solve specific business challenges. Business solutions can be built by integrating expertise in various forms, be it intellectual properties. products, platforms, tools, accelerators, frameworks, patented technologies, skills, business process services and so on. A co-innovation-led future The geographic boundaries across the globe have significantly blurred with the rise of globalization. However, organizational boundaries remain significantly intact. The future, though, will see an increasingly intertwined business ecosystem where enterprises will not just collaborate vertically across their value chains but also horizontally with their so-called competitors. Technology providers are at an inflection point today and are poised to become pioneers in driving this change. Consumer-facing companies cannot wait for a technology partner to build a capability and then deploy. The start-up ecosystem across major countries is thriving and technology providers need to provide the much-needed impetus by

packaging start-up offerings along with their domain and technology skills to scale adoption of joint business solutions. Large cloud service providers are betting big on their partner programs and are seeking support from managed services providers in building innovative solutions, porting them on cloud and hosting them on their marketplaces. It is time technology providers forge meaningful partnerships to achieve mutual business goals while enabling the best possible business solutions to enterprises. The uncertainty that we experience today surrounding the demand, supply and growth of global economies has led to a volatility in organizational spending patterns at various levels since a few months. However, we believe that investment in innovation should not be a casualty of this short-term strategy. Consumer behavior is changing rapidly, and enterprises are being forced to transform their entire strategy, business models, technology landscapes and approach towards serving their customers. Continuous innovation and collaboration are the only vaccines that can provide the immunity enterprises need to not just survive but also thrive in this world of rising uncertainties and consumer expectations. For information about how Wipro's innovative business solutions can help drive business, process, and technology transformation for you, click here. Mandar Vanarse General Manager and Head - IP & Business Solutions, Wipro Mandar is a digital transformation and innovation leader, design thinker, and strategy coach with 26 years of industry experience. He is the author of ASSIMPLER Framework for Enterprise Architecture / IT strategy, which has been implemented by various enterprises and governments. Mandar's expertise includes product development lifecycle and IP creation. He has worked with Product Engineering Services organizations to design and develop worldclass products having global footprint. He has designed architectural design patterns and frameworks to address chronic architectural challenges and business problems. Mandar's domain knowledge spans across various industry segments including Banking, Government, Health, Manufacturing, Communications and Oil & Gas. Palash Acharya Principal Consultant - IP & Business Solutions, Wipro Palash is a management consultant with 6 years of experience in building and executing strategy for Wipro. He currently leads business, commercial and marketing strategy for Wipro's IPs & Business Solutions. He was also instrumental in building value propositions and GTM strategies for Wipro's Data, Analytics and Artificial Intelligence business and driving sales and growth strategies for Wipro's India and Middle East geographies. Palash specializes in corporate strategy, organic and inorganic growth levers, value propositions, business and operating models, fostering and commercializing innovation, design thinking, marketing, storyboarding, and culture transformation.

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fill the required details to access the content Rajan Kohli Rajan Kohli Global
Head, Wipro Digital Rajan Kohli has held various sales and business
leadership roles within Wipro. Prior to taking over the role as Head Banking & Financial Services, Rajan was the Chief Marketing Officer for
Wipro's Global IT Business. He was responsible for shaping Wipro's
corporate identity and enhancing the global brand & positioning. Prior to
this, he has spent almost a decade in Finance Solutions in different roles,
the last one being the US Sales Head for Banking. Rajan joined Wipro from
the Indian Institute of Management (IIM), Bangalore, where he completed

#### Agility is Hard Because It's Soft

---- Arcticle source ---- https://www.wipro.com/blogs/rajan-kohli/agility-ishard-because-its-soft/ ---- About the Author Contact Wipro Please fill the required details to access the content Agility is Hard Because Its Soft November | 2020 Agility as a concept has been discussed for years, though the competitive advantage of being more agile came into sharp focus in 2020. The increased pace of change, rapidly evolving customer needs, compressed timeframes for responding — all of these and more drove the topic back onto every Board agenda. More than any other time in past 40 years, the ability to rapidly make decisions and take action is a defining factor of success. Many organizations were caught short as the pandemic forced rapid decision-making. While responses to COVID-19 varied, organizations with higher degrees of business agility were able to better make, operationalize, and sustain the necessary changes. But achieving agility can be a major challenge. How can organizations move beyond boardroom discussions to affect tangible change? If some organizations have struggled for years to build agility, how can others expect to achieve it quickly, especially now? Agility and agile are not the same thing It's important to recognize that technology is just one part of agility. "Agile" with a capital "A" is a framework for developing software, products, and services. Being "agile" — lower-case "a" — is fundamentally about being able to react faster to change than your market or competitors. Enterprise agility is an organizing principle; it infuses everything you do. In essence, it's a function of your organization's structural flexibility, adaptability, and responsiveness. Agility is not a thing, not a single-minded initiative to move to the cloud or adopt of a version of the Spotify engineering model. These may enable agility, but the reality is simpler - and more complex. It's how your company is organized, how teams are empowered, and how comfortable they are to make decisions and own the consequences. What does an agile organization look like? Being agile means being outcome-oriented rather than processcentric. It means being aligned to value streams, with teams and structures oriented around customers, employees, and market dynamics. To be focused on delivering value —and moving fast - leaders need to enable teams and people to become decision makers who are comfortable owning the consequences and operating in a matrix. When teams are porous, with people moving easily across them to leverage their capabilities, silos can be broken and the organization can act with more agility. The underlying foundation is the idea of modular, scalable architecture. Agile software development is possible thanks to APIs. An agile organization works on the same principle, with every capability effectively becoming an API. Leaders create a toolkit of swappable components - whether for a product, system, or process - that enable the organization to build in a modular fashion. Changes no longer require redoing the whole, just adjusting the smaller components. This allows teams to work and iterate in parallel and minimize dependencies. However, sequencing matters, and communication and

coordination are critical. This approach doesn't mean companies must dispense with standard functional areas. It simply means they should use cross-functional teams with shared goals and shared accountability that cuts across the organization. Where agility and Agile start to connect is the requirement to fuse the perspectives of business and IT stakeholders. For example, when an organization develops a new product, business owners and product owners are integrated from start to finish and are combined with engineers and marketers. This is analogous to the DevOps way of working. We've seen this approach succeed across sectors. In the pharmaceutical industry, clinical trials used to take 18-24 months; now, agile companies collaborating across their organization and with partners are hastening the development of critically important vaccines. In the automotive sector, a leading manufacturer was able to quickly analyze its operations and customer intelligence to turn a downtown showroom into a transactional hub that increased sales. Even Wipro has benefited from this fusion: our five-year integration of design and engineering teams enabled us to pivot quickly when the pandemic struck. What does it take to become agile? Without technology, tools, and the "API-ification" of work, agility would be nearly unachievable. But becoming agile is as much of a people and culture issue as it is an IT requirement. Technology can be deployed within days or weeks. Establishing a culture and mindset is the deeper change, which is why so many leaders and companies struggle. Fortunately, there are ways to accelerate agility. Be willing to change your mindset. Leaders need to be able to think differently in order to create a foundation for people to do things differently. If you can't change your mindset as a leader, how do you expect to elicit change in your organization? Leaders must create the right culture and abandon the "this is how we've always done things" attitude. Empower delegated decision making with a different risk appetite. To change means to risk. If they want to accelerate decision making, leaders must delegate decision making. But they cannot separate the responsibility of making a decision with the accountability for the consequences of that decision. This will feel uncomfortable for everyone, but it rapidly grooms a culture of empowered leadership. Hire right, then get out of the way and enable. Agile leaders need to be - and hire - "servant leaders." Servant leaders share power, put others' needs first, and help people develop and perform to their utmost abilities to grow and benefit stakeholders. To foster the ability to pivot, it's important to minimize constraints. This means giving people the room, support, and resources they need to succeed, and holding them accountable for outcomes. Institute metrics that matter. If you're serious about becoming outcome-oriented, start measuring outcomes and leading indicators rather than traditional units of work or measures of silo-process efficiency. Measurements incentivize the desired behaviors and results; people behave how they are measured. Forgive (and reward) people for re-aligning processes that have hindered business outcomes and share their learnings with the broader organization. Becoming agile is about changing culture Overhauling the technology stack will advance the organization, but it cannot magically make the organization agile. Agile is hard because, fundamentally, it's "soft." It calls for eliminating silos, and that's a people issue. Being an agile enterprise encompasses culture — how you think, solve problems, and make decisions — not just how you operate. Change has to be managed across all key dimensions: people, process, and technology. Technology is the easiest

part of the change equation. Process change can be laborious, but it's still fairly straightforward. People change is the toughest part. It's also the most important. Companies can't sit back after six months of pushing or when the pressure eases and consider the job done. Evolving culture doesn't happen overnight. However, the impact of increasing agility - essentially increasing an organization's ability to evolve - can be seen profoundly and quickly. The real challenge is to maintain flexibility and ensure that the innovations of today do not become the dogma of tomorrow. To be agile is to "learn and unlearn" through adaptation to market dynamics. Enterprises must embrace continual evolution rather than a finite number of revolutions. Conclusion It doesn't take a public health crisis to shock your clients' business, or your own. Disruption is the great unknown. In a world moving ever faster, enterprise agility is about ultimate resilience — the ability to adapt, reinvent, and always deliver value. Rajan Kohli Global Head, Wipro Digital Rajan Kohli has held various sales and business leadership roles within Wipro. Prior to taking over the role as Head - Banking & Financial Services, Rajan was the Chief Marketing Officer for Wipro's Global IT Business. He was responsible for shaping Wipro's corporate identity and enhancing the global brand & positioning. Prior to this, he has spent almost a decade in Finance Solutions in different roles, the last one being the US Sales Head for Banking. Rajan joined Wipro from the Indian Institute of Management (IIM), Bangalore, where he completed his Post Graduation in Business Administration with specialization in Marketing and Finance. He also holds an Engineering degree in Electronics & Communications.

www.wipro.com/blogs/sundararaman-sankaranarayanan/ ----- Contact Wipro Blogs By Author Fashion Industry 2.0: Reduce, Reuse, Recycle - and Rent SAP Industry Cloud: An Opportunity to Solve Industry-Specific Business Challenges The Intelligent Enterprise: How to achieve effortless transformation Please fill the required details to access the content Sundararaman Sankaranarayanan Sundararaman Sankaranarayanan Head, SAP Digital Innovation Group, Wipro Limited Sundararaman Sankaranarayanan heads the SAP Digital Innovation group at Wipro Limited. He has over 25 years of experience across SAP cutting-edge technologies, business architecture process design and development and process transformation as well as SAP platform architecture management. He can be reached at sundararaman.sankaranarayanan@wipro.com Sustainability is a looming concern for consumers and corporations alike, particularly in the fashion industry. The journey to an intelligent enterprise demands the agility to cope with rapidly changing requirements and industry-specific innovation IT modernization is reaching its peak as ISMAC (IoT-Social-Mobile-Analytics-Cloud) finds its way into every business. ===================

### The Intelligent Enterprise: How to achieve effortless transformation

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Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content The Intelligent Enterprise: How to achieve effortless transformation July | 2019 IT modernization is reaching its peak as ISMAC (IoT-Social-Mobile-Analytics-Cloud) finds its way into every business. This modernization is good but not enough. It is a bit like giving an athlete a shot of adrenalin—the adrenalin augments performance, but it doesn't help the athlete discover new muscles, new techniques, new strategies and new sport in which to compete. In order to achieve this, the athlete needs a complete transformation, starting with a change in training programs, support systems, mindsets, etc., to discover the body and the mind's hidden capabilities. A business is no different. Today's businesses must go beyond modernization and tap into the power of digital transformation to uncover new opportunities and unlock previously hidden business value. To do this, they must apply intelligent technologies such as Automation, Machine Learning, Artificial Intelligence (AI), Data Science, Analytics, Blockchain and IoT at the right places in all their business processes. When combined with Design Thinking, the enterprise has all the firepower it needs for structured innovation. This isn't easy to do. You can spend cartloads of dollars in the latest and greatest technology but you cannot unlock business value unless you reimagine business processes. Today's organizations must bring intense focus to doing this because, for those who do, the rewards are substantial. Among the rewards are: Being able to offer a personalized consumer experience where each customer can be engaged one-on-one. Adidas, for example, aims to make fully customized shoes using athlete data and robotics, making 'shoe trials' redundant and delivering unprecedented comfort[i]. Establishing a connected over a trusted digital ecosystem where businesses can transact with customers. partners, suppliers, regulators, governments across networks in a transparent and efficient manner. An emerging example of this is the utility industry where blockchain is being used in the trading, transmission and distribution of green energy for better transparency (and lowered cost)[ii]. 'Servitization' of products that allows business to go beyond selling a product by creating services that add to revenue streams across the value chain, from sale to shredder. A classic example is that of IoT-enabled construction equipment that can be leased based on accurate usage information, geo-fenced for operations, and tracked in real-time to ensure contract compliance[iii]. Operational agility that de-risks a business by ensuring it can respond intelligently to internal and external changes. An example of this would be the ability of an enterprise to switch suppliers in real-time based on external demand signals. Data-driven decision-making where facts, data, AI, Machine Learning and business models are used to simulate outcomes, allowing executives to arrive at intelligent decisions resulting in the best possible outcomes. A simple and elegant way to achieve this transformation is SAP's Intelligent Enterprise suite that is purpose built for organizations that are left stranded with legacy systems. SAP's Intelligent Enterprise suite has changed the fundamental DNA of ERP by ensuring it goes beyond its traditional role of being a mere Systems of Record; it now also functions as a System of (Process) Transformation and a System of Engagement. For businesses keen on a digital future, as a means of creating fresh opportunities and unlocking new value, SAP just made the

task of transformation a lot easier. References [i] https://www.techrepublic.com/article/how-adidas-uses-robots-and-athlete-data-to-dramatically-cut-shoe-production-time/ [ii] https://www.cnbc.com/2018/11/07/blockchain-tech-is-taking-on-renewable-energy-trading-in-one-country.html [iii] https://www.thehindubusinessline.com/business-wire/wipros-cloudbased-iot-platform-helps-connect-over-10000-jcb-india-construction-equipment-machines/article8178661.ece Industry: Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

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#### SAP Industry Cloud: An Opportunity to Solve Industry-Specific Business Challenges

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Cloud. This gives the power back to customers to process the variations without compromising the 'building blocks of standardization'. industry-focused, standalone applications using pre-defined business models from an intelligent suite, and a scalable API framework with advanced services of their business technology platform fills the gaps in the market demand. This helps support businesses innovate and accelerate their journey to the intelligent enterprise. SAP Industry Cloud will not only provide the partner ecosystem new monetization opportunities, but will also empower industry domain experts to understand customers' businesses and challenges better and offer innovative new solutions. This will also be a great opportunity for the enterprise customers to get their business problems addressed by embracing flexible and specialized industry solutions to support their strategic transformation initiatives. The value proposition and technological construct of SAP Industry Cloud is to bring industryspecific innovation for enabling enterprise transformation and growth. This will deliver enterprises new opportunities to create agility in their industry value chain. Bringing the experience and knowledge of customers and partners to a common forum will create differentiated use cases related to new business processes and business models. It's a win-win for all! Industry: Sundararaman Sankaranarayanan Head, SAP Digital Innovation Group, Wipro Limited Sundararaman Sankaranarayanan heads the SAP Digital Innovation group at Wipro Limited. He has over 25 years of experience across SAP cutting-edge technologies, business architecture process design and development and process transformation as well as SAP platform architecture management. He can be reached at sundararaman.sankaranarayanan@wipro.com Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

### Fashion Industry 2.0: Reduce, Reuse, Recycle - and Rent

---- Arcticle source ---- https://www.wipro.com/blogs/sundararaman-sankaranarayanan/fashion-industry-2-reduce-reuse-recycle-and-rent/ ---- About the author Contact Wipro Please fill the required details to access the content Fashion Industry 2.0: Reduce, Reuse, Recycle – and Rent May | 2021 Sustainability is a looming concern for consumers and corporations alike, particularly in the fashion industry. According to a World Economic Forum report, the apparel industry is responsible for 20% of all industrial water pollution and is the second largest consumer of water, while discarded clothing has begun inundating landfills. In fact, the Ellen MacArthur Foundation says that by 2050 the fashion industry may use up to 25% of the

world's carbon budget. While the fashion industry has taken steps to reduce its carbon footprint, more can be done. Leading companies have already recognized this and begun to take action. Innovation through technology may offer a unique path forward. Embracing the Circular Economy Fashion houses, retailers, and consumers are much more environmentally conscious than they were just a few years ago. Consumers are driving the change by looking to adopt new sustainable models of fashion consumption and play an integral role in tackling environmental issues. This new breed of consumer is more inclined to associate with or buy from brands that perform well on environmental practices. New business models are emerging to meet the demands of these consumers. These models allow clothes to be rented, resold, or recycled, thereby preventing additional pollutants and waste - and moving the industry toward circular-economy principles. A circular economy aligns with the popular 3R approach: reduce, reuse and recycle. New business models are emerging that support these notions, like renting highfashion products or retooling products from designer brands (reuse), or repurposing products with organic/anti-bacterial composition (recycle). These out-of-the-box ideas are gaining traction. To be competitive, circular models should be adopted by all supply chain leaders. Adding the 4th 'R' to the 3R Approach It's time for the fashion industry to broadly consider a fourth R: rental. Building on Wipro's dedication to sustainability and role as a founding member of Transform to Net Zero, we've developed a seamlessly integrated SAP industry cloud solution called Fashion Rental to help the fashion industry advance its sustainability goals. Fashion Rental hits the sweet spot for customers who seek an affordable clothing option, are drawn to eco-conscious clothing, yet appreciate the products of luxury fashion manufacturers. The concept has already been proven: H&M, a global clothing retailer, has a fashion rental service to inspire its customers to look at fashion in a circular way. Considering that up to 85% of textiles go into landfills every year, finding new value in wearable clothing that would have been discarded can drastically reduce waste while meeting the needs of consumer and company alike. The subscription-based contract model can be deployed to product lines within a few weeks, helping luxury brands and niche manufacturers offer online rentals of any product with real-time availability, schedule, price, and quality certificates. Based in the cloud, this innovative approach embraces and encourages a circular economy business model in which consumers gain access to new and "high-fashion" apparel, while designers and retailers generate recurring revenue from the same product. The reviews of this new model are in: Wipro's Fashion Rental solution won the SAP Innovation Awards in the 'Partner Paragon' category. More-detailed information is available here. Buy Less, Rent More Organizations worldwide, including in the fashion industry, have been trying to reduce their impact on the environment. The circular economy is finally getting chic appeal, and rental fashion is set to boom. "Something borrowed" is no longer a taboo phrase. Imagine the difference a few changes in shopping habits can have on the environment. Renting instead of buying reuses outfits and reduces textile waste produced every year. With the 4R approach of Wipro's Fashion Rental Solution, retail and fashion companies can capitalize on new revenue models, contribute to a reduced carbon footprint, and deliver an improved experience for customers that enables them to buy less and rent more. Sundararaman Sankaranarayanan Global SAP Digital Innovation Group Head, Wipro Limited Sundar heads the

global SAP Digital Innovation group at Wipro Limited. He has over 25 years of experience across cutting-edge SAP technologies, business architecture process design and development, process transformation, and SAP platform source ---- https://www.wipro.com/blogs/subhas-mondal/ ---- Contact Wipro Blogs By Author Will 5G impact our wellbeing? Please fill the required details to access the content Subhas Mondal Subhas Mondal Wipro Fellow and Chief Architect - 5G, Wipro Limited Subhas is a Wipro Fellow and Chief Architect of the organization-wide 5G initiative at Wipro. He has over 27 years engineering experience in Telecom Research & Development. He is a Senior Member of IEEE. Subhas is a passionate technologist and has developed several solutions & frameworks in emerging technology areas such as 5G, SDN/NFV, Li-Fi, Cyber Security and AI for Network Automation. He is a graduate from IIT Kharagpur in Electronics and Electrical Communications Engineering. Prior to Wipro, he worked for C-DOT as a research engineer and developed a remote switching product ground-up. Subhas can be reached at... Email: subhas.mondal@wipro.com Twitter: https://twitter.com/subhasmondal03 LinkedIn: https://www.linkedin.com/in/ subhas-mondal-19027a1/ Visit: https://www.wipro.com/blogs/subhas-mondal/ The world is on edge and awaiting the rollout of 5G.

#### Will 5G impact our wellbeing?

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question is, how do you achieve these performance requirements? For high throughput, channels with wideband spectrum are needed. If it is sub 6GHz, even if the entire spectrum is allocated, the bandwidth that can be allocated is limited to 6GHz. You cannot do anything more than that. If a large number of applications require high bandwidth usage, the wireless base stations need to provide a very high system throughput as 6GHz becomes the limiting factor, even when the entire 6GHz is made available. The spectrum at sub-6GHz is split into many different bands and the allocated spectrum for cellular wireless communication is currently limited to a channel bandwidth of 5, 10, 15 or 20 MHz. In order to meet the 5G eMBB (Enhanced Mobile Broadband) requirements, the channel bandwidth needs to scale beyond 100MHz - up to at least 1 GHz. In order to allocate a channel bandwidth of 100MHz or higher, mmWave bands that have a larger channel bandwidth are considered. 5G New Radio (NR) supports beam steering and narrow beam formation that could be directed and transmitted toward a specific user when there is a need to transmit. 5G requirements demand 100 times energy efficiency and the way to meet this requirement is to transmit only when and where it is required. In the current system, the base station may have multiple sectorial antennas and all of them are used to transmit in all directions at all times to provide required coverage and capacity. However, in 5G New Radio, the UE (User Equipment) can be localized and the base station can transmit to the UE in a directed beam when there is a data demand. The Massive MIMO technology allows radiation of the transmitted power only when the user consumes data. The control signaling detects the state of the UE, the density of the connection requirements and decides the right number of transmission sources that need to be activated for communication. This technique of transmitting signals only when it is required and to those users who need it, significantly reduces the amount of radiation. 5G Spectrum Bands Let us look at 5G radio spectrum band specifications. 5G operates in two distinct bands - Frequency Range 1 or FR1 and Frequency Range 2 or FR2. FR1 operates between 0Hz to less than 6 GHz, and FR2 operates at frequencies above 24 GHz band. mmWave falls under FR2 band and currently a lot of trials and auction are taking place around 28 GHz band. The concern that has been raised pertains to mmWaves. Let us first demystify the basic attributes of a radio technology. When it comes to the characteristic of a wireless network, usually three parameters get discussed most of the time viz. connection speed, latency and connection density. For example, a 4G network provides a radio technology that is superior to the 3G radio technology. However, what is less discussed is the total energy consumed by a generation of radio technology. 5G radio specification in IMT-2020 demands 100 times energy efficiency as compared to 4G technology. If a radio specification is to be accepted by ITU as a 5G technology standard, the candidate technology has to comply with this requirement, which means that the overall energy consumption has to reduce by 100 times. As the frequency of an electromagnetic wave increases, its wavelength reduces. When we are comparing 6 GHz versus 28 GHz, there is a significant reduction in the wavelength from centimeter range to millimeter range wavelengths. As the wavelength reduces, the scattering and penetration loss increases. Let us compare a balloon with a needle and the kind of impact each of these will have when they hit a body. If a balloon hits you, the balloon will bounce back without getting inside your body but if a needle hits, it will pierce through the body. A similar

phenomenon happens in an electromagnetic wave. When the wavelength is shorter, the signal gets attenuated faster as the amount of energy that gets absorbed in the media is higher as compared to the waves with longer wavelength. When a shorter wavelength signal passes through the body, the body absorbs more energy as compared to a longer wavelength signal. This is where the regulatory authorities come in to ensure a safe limit to the radiation power to avoid any harmful effects on the living beings. As a wireless communication technology is proposed to use an electromagnetic wave as a carrier wave, detailed studies are carried out before it gets approved. The level of permitted energy is kept significantly below the safe limits to avoid any harm to humans and other living beings. Will 5G cause harm to living beings? The 5G User Equipment and the cell towers are both sources of radiation that transmit electromagnetic energy. As discussed above, there is a compliance requirement on the upper limit of the SAR value or the specific absorption rate. As long as the SAR value is within the regulatory limit, we can assume that it is safe and fit for use. When it is beyond the threshold that has been defined as the regulatory limit, it can cause harm. However, no devices can operate if they violate the limit. Multiple clinical trials have been conducted not just for 5G but also for earlier generation technologies like 2G/3G/4G when they were rolled out. The studies were mainly on electromagnetic radiation and their impact on health. There was a lot of skepticism when the first cellular technology roll out was being planned. However, these wireless networks have been in use for close to two decades now and there is no conclusive evidence of harm to humans due to these radiations. Now, let us look at what has changed in 5G as compared to 4G. 4G uses frequencies typically below 3.6GHz bands for licensed spectrum. 5G uses both sub-6GHz and mmWave frequencies above 24GHz. mmWave wavelengths are shorter, incur higher loss and have higher absorption in the body as explained earlier. That is the primary reason why concerns over a potential health hazard have been raised, many of which are unfounded. 5G is 100 times more energy efficient than 4G. Majority of the energy consumption in a network comes from radio and this means, the transmitted power is expected to reduce by 100 times as compared to 4G. This has been enabled by a set of new technologies like dynamic beam steering, narrow beam width, cognitive transmission toward the user etc. that has been briefly discussed earlier. In simple terms, 5G new radio will transmit a narrow beam toward users rather than transmitting it in all directions. This will make a huge difference as 4G usually transmits in all directions all the time while 5G transmits only in the direction of an active user. Of course, there is a small amount of energy used all the time to detect the presence of any user but that has no significant effect. For the blanket coverage, sub-6GHz spectrum is suitable and is the preferred spectrum for mass rollout. Most of the mobility issues will be done at sub 6GHz which is FR1. Any concern about mmWaves being bombarded at every place with the proliferation of cell towers is unjustified as it is not a commercially viable option per the current technology maturity. If everything has to be replaced by new radio operating at mmWave, it cannot be rolled out economically without a very compelling use case that can be monetized. The 5G technology is here to stay and one can safely say that regulators are ensuring that it does not impact our health adversely. Industry: Subhas Mondal Chief Architect of the organization-wide 5G initiative at Wipro. He has over 27 years engineering experience in Telecom Research &

Development. He is a Senior Member of IEEE. Subhas is a passionate technologist and has developed several solutions & frameworks in emerging technology areas such as 5G, SDN/NFV, Li-Fi, Cyber Security and AI for Network Automation. He is a graduate from IIT Kharagpur in Electronics and Electrical Communications Engineering. Prior to Wipro, he worked for C-DOT as a research engineer and developed a remote switching product ground-up. Subhas can be reached at... Email: subhas.mondal@wipro.com Twitter: https://twitter.com/subhasmondal03 LinkedIn: https:// www.linkedin.com/in/subhas-mondal-19027a1/ Visit: https://www.wipro.com/ blogs/subhas-mondal/ To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. Salesforce offers an incredible range of functionalities, making it difficult to find.... A report from Forrester predicts up to 20% of Fortune 500 companies will not make it through 2021 intact. "[For] some, their assets will be dissolved or purchased; others will just go out of business." One possible cause of this is a lack of strategy when investing in and utilizing technology. "The pandemic revealed the flaws in many companies' technology...and their tech leaders were found mired in Band-Aids like tech modernization, Arcticle source ----- https://www.wipro.com/blogs/neeraja-adusupalli/ -----Contact Wipro Blogs By Author Enterprise Darwinism and democratization of engineering Please fill the required details to access the content Neeraja Adusupalli Neeraja Adusupalli Practice manager, Enterprise Business Integration Neeraja Adusupalli has over 20 years of IT experience delivering large digital transformation and modernization programs in the integration space. She is presently working as a Delivery Head in Wipro. She has managed large accounts from Order to Invoice and adopted next generation delivery models to drive efficiency, employee satisfaction and customer delight. These are times where organizations that adapt guickly and efficiently to digital transformation survive while others simply fall by the wayside. =================

## Enterprise Darwinism and democratization of engineering

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but to explore ways of enabling business users and the larger community for faster agile adaptive software rollout. In other words, democratization of engineering is the need of the hour. This democratization of software engineering in project execution has some of these arms - Automation, Low code-No code, and crowdsourcing. Automation An enterprise's vision of democratization will never become a reality without the automation of relevant business processes and elements of their customer journey. Tasks are to be democratized by identifying and defining those that are to be performed by bots, leaving the activity of decision-making with the people. Automation breaks barriers and provides entry for those who do not have the knowhow to complete a task. It is enough to know why and what needs to be done to complete the task. Alongside all repeated activities, which are routine in nature, rule-based activities that involve structural data should be automated to improve efficiency and optimize business operations. Low Code No Code (LCNC) LCNC platforms, also referred to as Citizen Development platforms, are often used by business users and administrators to build applications all by themselves, rather than waiting on IT teams to deliver. These users just need to know the related business processes and workflows to build the applications. LCNC platforms are GUI-based, where application components will be available in a drag-and-drop model. Users need to connect those components, build the applications and test them. Another extended usage is to allow the end user, consumers, and partners to key-in data into self-help portals to build business processes. Crowdsourcing Business processes and applications, which cannot be automated and need more customization and contextualization, should be crowdsourced to get coherent functionality implemented. In the digital era, enterprises want to market the innovative features and capabilities of their products and services faster to have an edge. These innovations would require the use of emerging technologies and enterprises might be constrained with skill availability for the same. This is where crowdsourcing allows enterprises to tap competent communities and execute parallel iterations or sprints thereby scaling up delivery with speed. Also, crowdsourcing gains more prominence as the software workforce millennials are increasingly gravitating toward the gig economy. Organizations will look for automation, citizen development and crowdsourcing to get a major chunk of the work done (refer Figure 1). This would thus require smaller dedicated project teams essentially to integrate all the pieces together and become a customer-interacting team to exhibit accountability to the customer. However, project managers have to learn this new way of execution, as management parameters (scope, schedule, cost and quality) will continue to be the cornerstone of project success. Figure 1: Cut down in the work done by the project team through automation, low code no code and crowd sourcing Industry: Neeraja Adusupalli Practice manager, Enterprise Business Integration Neeraja Adusupalli has over 20 years of IT experience delivering large digital transformation and modernization programs in the integration space. She is presently working as a Delivery Head in Wipro. She has managed large accounts from Order to Invoice and adopted next generation delivery models to drive efficiency, employee satisfaction and customer delight. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force.

#### **Hiral Chandrana**

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### Accelerating Digital with Modern Platforms

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The reality is, Modernization is foundational to Accelerate Digital and become a smarter, more adaptive enterprise that can successfully execute business model transformations. Until about two years ago, Modernization projects were executed in silos; cloud migration, mainframe or application rationalization, API-based strategy, implementing a packaged SaaS and PaaS for specific functional areas, etc. The scope, investments and intent of customers have significantly shifted, where enterprises are approaching Modernization as a strategic priority, not just to keep their IT or process landscape current but as a differentiated proposition to capture market share, integrate acquisitions, introduce new products and accelerate to become digital businesses. Organizations that are truly adaptive do not just survive but thrive in a fast-paced environment where speed to business expectations are high. We have analyzed the journeys of about 25 global clients from various industries and observed 5 patterns that were consistent when enterprises transform from a traditional mindset to a smarter adaptive organization. These patterns are: Each of these patterns has maturity levels and is inter-connected. Navigating the roadmap effectively will move organizations closer to becoming agile and adaptive. We call this our Enterprise Digital Journey framework where Modern Platforms are foundational to achieve the acceleration. We can think of this foundation as "Plumbing", or even a "Sewage System". This is the "Digital Core" for front to back office transformation, and has to be future-proof and continuous. Irrespective of the solutions to Modernization, there are two critical business considerations (unique for each industry or domain) when prioritizing your roadmap: These considerations are crucial to an organization for creating a roadmap for digital transformation. Industry: Hiral Chandrana SVP & Global Head - Modern Application Services Modern Application Services (MAS) is Wipro's largest Service Line and Hiral is responsible for P&L of applications business across all industries, which includes Application Engineering & DevOps, CRM and Customer Experience, Enterprise Apps & Modernization, Digital Integration, Cloud Platforms, and Enterprise Architecture. Hiral has 25+ years' extensive experience in P&L management, leading Global Teams and IT Delivery, Executive Relationships, Large Complex Pursuits, and growing Applications, Infrastructure, Analytics, BPO, ERP/PLM businesses in Retail, Manufacturing, Consumer Goods and Healthcare/Life Sciences. He has built multiple practices & industry verticals and transformed several units to become digital businesses. Hiral participates in leading forums including Gartner CIO Summits, NRF, and has developed strategic partnerships with SAP, Salesforce, Oracle, Microsoft, Adobe, IBM, HP, AWS. Hiral has an Engineering background, with a Master of Science (Computer Graphics/VR) from Washington State University and Executive MBA from Iowa State University Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to reexamine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

### Applying a Strategic Mindset to Business Decisions

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the future. Industry: Hiral Chandrana SVP & Global Head - Modern Application Services Modern Application Services (MAS) is Wipro's largest Service Line and Hiral is responsible for P&L of applications business across all industries, which includes Application Engineering & DevOps, CRM and Customer Experience, Enterprise Apps & Modernization, Digital Integration, Cloud Platforms, and Enterprise Architecture. Hiral has 25+ years' extensive experience in P&L management, leading Global Teams and IT Delivery, Executive Relationships, Large Complex Pursuits, and growing Applications, Infrastructure, Analytics, BPO, ERP/PLM businesses in Retail, Manufacturing, Consumer Goods and Healthcare/Life Sciences. He has built multiple practices & industry verticals and transformed several units to become digital businesses. Hiral participates in leading forums including Gartner CIO Summits, NRF, and has developed strategic partnerships with SAP, Salesforce, Oracle, Microsoft, Adobe, IBM, HP, AWS. Hiral has an Engineering background, with a Master of Science (Computer Graphics/VR) from Washington State University and Executive MBA from Iowa State University Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to reexamine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. \_\_\_\_\_\_

### Sankar Natarajan

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### Establishing blockchain privacy through Zero Knowledge Proof

----- Arcticle source ----- https://www.wipro.com/blogs/hitarshi-buch/ establishing-blockchain-privacy-through-zero-knowledge-proof/ ----- About the Author Contact Wipro Related Blogs Unified digital delivery model for telco service providers Banks need to modernize their data infrastructure Improving performance & scalability of blockchain networks Please fill the required details to access the content Establishing blockchain privacy through Zero Knowledge Proof June | 2019 Can I cast my vote without revealing my date of birth? Can I obtain a loan without revealing my current salary? Can I fulfill auditory requirements without revealing my customer's private data? The answer to all these questions is a "yes", provided techniques, such as Zero Knowledge Proof (ZKP), a technique by which a prover can convince the verifier of a fact without revealing the actual content, are leveraged, ZKP operates on three basic tenets; Zero Knowledge Proof techniques have been around for almost three decades. A renewed interest in ZKP amongst industry leaders and researchers is observed which can be attributed to increased adoption and application of blockchain technology. Why blockchain and ZKP? Since public blockchain platforms do not provide capabilities to address data and transaction privacy, there is an imminent need to apply ZKP techniques. In a typical blockchain setup, all transactions are broadcast to all participants and the details of interaction meant for two parties is visible to others as well. And this can result in breach of privacy and/or confidentiality. In such cases ZKP can ensure that others only know that a valid transaction has taken place, but no information is available to them about the sender, recipient and type/quantity of asset transferred. One of the most popular techniques is zk-SNARKS (zero knowledge - Succinct Non-Interactive Argument of Knowledge). This technique can be used to define a quadratic equation which takes public data (known to all) and private data (only known to prover) and inputs to generate proof, which can then be validated by the verifier. For example, ZCash is the first cryptocurrency to implement zk-SNARKS. Potentially there could be other use cases also, such as proving one's age without sharing date-of-birth or proving one's identity without sharing details of their identity proof, etc. ZKProof Workshop This need was evident during our participation at ZKProof 2nd Workshop. This event was attended by industry and technology leaders, startups, researchers and academicians with the intent of sharing and collaborating on the following topics: Learnings While ZKP used with blockchain does solve the problem of data privacy and security for cryptocurrency use cases, the current implementations require significant computational power to generate the zero knowledge proofs. As complexity of the problem to be solved increases, the proof generation,

which involves executing arithmetic circuits in the range of 106 to 1012, becomes more compute intensive. Therefore, efficient and modular ZKP implementations are the need of the hour. In the ZKProof workshop, the efficiencies being introduced to various implementations, such as Bulletrproofs, zk-SHARKs, LegoSNARK, Distributed ZKP etc. were also discussed. Alternative Methods It is evident that public blockchain platforms will require ZKP techniques but at the same time certain alternatives are also available: Conclusion Privacy and confidentiality will continue to be an area of concern in this digital age. Therefore methods, such as ZKP show great promise in enforcing "honest" behavior and determining transaction "validity" without compromising the sensitive details. The usage and application of zero knowledge techniques in conjunction with blockchain is bound to increase as more efficient techniques get invented in the near future. Industry: Hitarshi Buch Lead Architect, CTO Office, Wipro Limited Hitarshi has 19 years of experience in IT architecture, consulting, design and implementation using blockchain, API, SOA, BPM and Java/J2EE technologies. He has experience in IT transformation and modernization initiatives and has provided enterprise-wide SOA-based solutions. In his current role, as a Lead Architect in Service Transformation at Wipro, he leads the Center of Excellence initiatives as part of the Blockchain practice. Digitalization and Cloudification are vital to business success and not an option any more. The Telco industry is one of the first to adopt newer technologies. With the advent of digital native customers, banks are facing a paradigm shift in their customer behavior. Performance and scalability of IT systems have always been the key non-functional requirements that are used to gauge the production-readiness of any implementation project.

### Improving performance & scalability of blockchain networks

----- Arcticle source ----- https://www.wipro.com/blogs/hitarshi-buch/ improving-performance-and-scalability-of-blockchain-networks/ ----- About the Author Contact Wipro Related Blogs Unified digital delivery model for telco service providers Banks need to modernize their data infrastructure Considerations for picking an end-point security solution Please fill the required details to access the content Improving performance & scalability of blockchain networks November | 2019 This article discusses: Performance and scalability of IT systems have always been the key nonfunctional requirements that are used to gauge the production-readiness of any implementation project. The same is true for a blockchain network, more so because of its distributed and decentralized model that enables peers to collaborate and build trust over a business network. Each peer node must perform computations and communicate with other peers to validate transactions, arrive at consensus and update the state of the shared ledger. It is imperative to be cognizant of the factors affecting blockchain performance and the improvement areas to make informed architectural decisions for a blockchain based solution. Performance of blockchain networks is generally measured as the average time it takes for a

transaction to be validated and stored in each peer node in a way that it cannot be reversed or revoked. While this is often termed as throughput it should not be confused with the number of concurrent transactions processed in a given time frame. Scalability of blockchain networks is the ability of that platform to support increasing load of transactions, as well as increasing the number of nodes in the network. Factors influencing performance of blockchain Current blockchain networks and their performance Public blockchain networks, such as Bitcoin and Ethereum comprise of millions of nodes and support cryptocurrency transactions. Due to the need of establishing trust between completely anonymous entities, a very compute and time intensive mining-based consensus mechanism is used. Thus, it takes a long time to achieve transaction finality, which results in transaction throughput of single digits. This is why public blockchains provide poor performance and scalability that creates the need to use techniques, such as side chains to offload the transaction processing from the main chain. For enterprise use cases involving B2B and B2C interactions between known partners, private permissioned blockchain platforms are used to create a consortium with a limited number of nodes. The resultant throughput is much higher because a more efficient consensus algorithm is used that does not need to produce a proof-of-work for committing transactions to the ledger. There is a new breed of blockchain platforms, also termed as blockchain 3.0, which is based on the principles of DLT (distributed ledger technology). These platforms help resolve the issue of performance and scalability by leveraging data structures, such as Directed Acyclic Graph and reducing the processing latency of transactions through innovative validation and voting mechanisms. Conclusion As described earlier there are several factors affecting the performance of blockchain network so benchmarking or performance testing of blockchain is not a straightforward exercise. Moreover, the use case being implemented and the architecture and design of off-chain components in a blockchain-based solution also need to be considered when processing end-to-end business transactions. Blockchain performance and scalability will continue to be a topic of intrigue and interest in the near future as blockchain technology is adopted and applied for a variety of use cases. There is a significant performance improvement in "blockchain 3.0" networks, though they are yet to see wide scale adoption. But before we embark on our search for a high performing blockchain platform that supports thousands of transactions per second, let us be doubly sure on whether the use case for which the solution is being envisaged requires the same. Industry: Hitarshi Buch Lead Architect, CTO Office, Wipro Limited Hitarshi has 19 years of experience in IT architecture, consulting, design and implementation using blockchain, API, SOA, BPM and Java/J2EE technologies. He has experience in IT transformation and modernization initiatives and has provided enterprise-wide SOA-based solutions. In his current role, as a Lead Architect in Service Transformation at Wipro, he leads the Center of Excellence initiatives as part of the Blockchain practice. Digitalization and Cloudification are vital to business success and not an option any more. The Telco industry is one of the first to adopt newer technologies. With the advent of digital native customers, banks are facing a paradigm shift in their customer behavior. Do you know what end-point protection tools are running on your desktop or laptop? If not, you can hover your mouse over at the

#### **Ameekar Charan**

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## **Key Ingredients for a Successful Innovation**

----- Arcticle source ----- https://www.wipro.com/blogs/ameekar-charan/keyingredients-for-a-successful-innovation/ ---- About the Author Contact Wipro Related Blogs Connectivity and Interoperability: Realizing the Full Potential of Comprehensive IoT Solutions Is Salesforce Right for My Nonprofit Organization? Beyond the Pandemic: Key Priorities for Agility and Growth Please fill the required details to access the content Key Ingredients for a Successful Innovation February | 2019 Innovation is a journey into the unknown. Very often, it is easy to get lost in the journey, unless the goal and the path is well defined. While goals are defined by business objectives, often the path requires understanding of business as well as technology. Take the recent example of a US-based sustainable energy company with \$31 billion in assets employing approximately 6,500 people. The size of the company might not be a very crucial factor to consider in the process of innovation. But the size gives us an indication of the company's firmly cemented processes. Yet, using a liberal sprinkling of open-minded people and the powerful yet flexible SAP Leonardo platform, this company was able to infuse intelligence into its gas pipeline network. This was done by getting real-time pressure data using IoT as well as predicting pressure threshold values using machine learning. All these resulted in improved asset maintenance, optimized processes and safer pipelines. While the objectives were clear (improving pipeline maintenance and overall process efficiency while reducing risk to humans, property and environment), the path to these goals had to be mapped. One of the most important aspects of a successful journey is the start. This was achieved by creating the right mix of teams to discuss/debate the business needs. Think of the discussions as a design workshop that is unfettered by the limitations of existing solutions, budgets and skills. It explores new ways of solving problems. The output is a rich set of detailed requirements along with their associated priorities. The second step was to spend time with the eventual end-users, understanding their everyday problems, visiting the sites and control rooms and examining/ observing operating environments. This process highlighted the issues which are sometimes difficult to identify. For example, it was realized that notifying alerts with change in color wouldn't work since the control team had a member who couldn't differentiate between minor color variations; or

equally difficult would have been to consider a need to switch-off the alerts until it was explained how this becomes vital when there is repair work in progress. The output of spending time at the site and user environments is a very clear list of needed functionalities and aesthetics. Armed with everything needed to build, execution started with clear, small milestones. Agile was chosen as the way of working to receive frequent feedbacks, be it on User Experience (UX) or on the actual functionality. One great thing about this engagement was the customer's attention to detail. It ensured high quality output in every sprint. Every need was carefully addressed and validated with the business. All the stated objectives were met, be it via the Geospatial visualization to ease monitoring aspects or providing digital history of the asset at the finger tips. Everything was crystalized into intuitive UX. One of the interesting things developed was a continuous Machine Learning model to recommend appropriate pressure thresholds. It considered factors like temperature, precipitation and historical data. While this was not a frequent activity, the risk associated of getting it wrong dictated the seriousness. SAP Leonardo was chosen as the development platform. The platform presents many advantages for large organizations facing similar challenges: It allows easy integration and adoption of complex technologies like Analytics, IoT and Machine Learning. It is easy to scale in or out; its world class security was an important consideration; and at the core of the platform, its native connectivity to backend enterprise systems sealed the decision. It is often seen that innovation teams have the right ideas. It is technology that falls short. However, SAP Leonardo is focused on Design Thinking and is able to leverage emerging technologies, such as Machine Learning, Big Data, Internet of Things and Blockchain, to create intelligence and predictive capabilities. This helps bridge even the most unpredictable business problems. Industry: Ameekar Charan Lead Consultant, SAP Solutions, Wipro, Ltd. Ameekar Charan is an SAP Architect who works on Digital technologies. SAP Leonardo is one of his focus areas. He has over 17 years of experience in SAP cutting-edge technologies, SAP transformation programs and defining digital roadmaps for businesses. He can be reached at ameekar.charan@wipro.com To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. Salesforce offers an incredible range of functionalities, making it difficult to find.... A report from Forrester predicts up to 20% of Fortune 500 companies will not make it through 2021 intact. "[For] some, their assets will be dissolved or purchased; others will just go out of business." One possible cause of this is a lack of strategy when investing in and utilizing technology. "The pandemic revealed the flaws in many companies' technology...and their tech leaders were found mired in Band-Aids like tech modernization, simplification, and consolidation." www.wipro.com/blogs/jivendu-biswas/ ----- Author's Posts Contact Wipro Please fill the required details to access the content Jivendu Biswas Jivendu Biswas Director and Practice Head of AI Solutions, Wipro Ltd. Jivendu is a technologist and innovator with two decades of experience in the hi-tech IT industry, having worked mostly in the Healthcare and Life Sciences domain. His expertise lies in Digital Transformation and AI-led intelligent automation. He has conceived and built multiple products and solutions which have led to better ways of working in the digital era.

### Artificial Intelligence can improve patient safety

----- Arcticle source ----- https://www.wipro.com/blogs/jivendu-biswas/ artificial-intelligence-can-improve-patient-safety/ ---- About The Author Contact Wipro Please fill the required details to access the content Artificial Intelligence can improve patient safety April | 2021 Patient safety is the most critical aspect in the drug lifecycle. Early detection of any reaction and its causality assessment is therefore one of the most important activities in the pharmaceutical industry. Digitalization has brought speed, but significant human work is still required. Medical causality necessitates understanding medical and clinical vocabulary, having medical knowledge, and being able to derive relationships and correlations. Each of these requires human cognitive capabilities. The challenge increases with new diseases and an avalanche of new drug discoveries. Monitoring and processing the huge number of drug reactions across the globe requires a large number of skilled medical professionals. However, even with the assumed availability of experts, the process is slow. Fortunately, with current advancements in Artificial Intelligence (AI), digital clones of medical professionals and pharmacists, AI digital PV case processors, can solve these problems and scale operations. AI digital clones can mimic some pharmacovigilance functions The AI digital PV case processor can add value in the pharmacovigilance automation function, reducing the workload for the human processing. The capabilities of a digital PV case processor include: At the core of the digital PV case processor is an AI and Machine Learning (ML) based inference engine. The engine can understand the pharmacovigilance context of an entity in essay or paragraph format, infer its meaning, and determine its relationship with other entities. The workflow engine orchestrates information and data flow to ensure streamlined case management and monitoring. The intelligent modules are loosely coupled and designed for microservices architecture and can be hosted on cloud, onpremise, or in hybrid forms. The engine can also integrate with external systems in multiple ways and understand E2B(R3). Inside the brain of the digital case processor lies a multi-module AI pipeline that works to accurately identify the entities expected in a human case processor. Figure 1: How the AI digital PV case processor works Introducing the AI digital PV case processor simplifies the ICSR process with significantly reduced human touch and processing times. What seemed to be a lengthy and complex set of 30-40 tasks can be limited to only two or three tasks. In the transformed ICSR processing, most tasks are performed by the AI digital PV case processor, leaving cognitive review to humans. Figure 2: AI digital PV case processor workload reduction The world needs safer drugs and treatments. While multiple simulations with digital technologies and high-power computing are currently being evaluated, human trials over a long period of time give the best picture. However, with the growing number of diseases and the recent COVID-19 pandemic, long testing and trial periods are not always possible. Pharmaceutical companies are forced to release medicines faster with calculated risks. These risks can be significantly mitigated by ensuring faster detection, better reporting, and streamlined remedial action. For this to happen, AI-enabled PV automation platforms (like a digital PV

#### **Sudheer Mohan**

### **Quality-Driven Design**

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navigate the app. Developers need to transform formerly distinct performance indicators on each client app to a set of unified metrics. This is why developers need cross-platform metrics, with a deep dive into HOW to implement the collection of these metrics. These metrics have to be collected in each release cycle. Faster release cycle can help fix issues pointed out by customers in the shortest possible time to mitigate damage/ loss of revenue. As customers get increasingly digital-savvy, enterprises need to scale up to match customer expectations not only to stay profitable but also to stay relevant. Some of the questions that face Digital Engineering teams working hard to enhance customer engagement are: Quality-Driven Design enables enterprises to continuously monitor applications in production and derive insights about user patterns, feature consumption, load patterns, customer feedback and even about features that are ignored by customers. These insights help enterprises quickly update applications in line with customer sentiments and expectations. Quality-Driven Design -Code-level Insights Today's smartphone is much more powerful than a laptop in its hardware and processing capabilities. Mobile operating systems are continuously evolving to ensure a "better than ever" experience to customers. These 2 continuous transformations have made it inevitable for enterprises to work harder on improving their mobile application "performance". Studies comparing performance of mobile applications to revenue are suggesting that faster the app, better the revenue prospects. This puts immense pressure on Enterprise Digital leaders to do everything possible to maintain their apps as the smartest out here. One of the key factors that define "best performing application" is application start time. It's one of the critical benchmarks for the application. Instagram starts in 1 second whereas WhatsApp starts in 1.2 seconds. LinkedIn and Netflix take 2.8 seconds to start. Enterprises need to compete with this kind of standards set by most popular mobile applications. It's no more an apple to apple comparison in Digital land. Where does your application stand? What can help your application improve its "performance" significantly. Application start time is influenced heavily by application programming. If a tool can inspect application executables and factors that are slowing down the application, it will be extremely useful for developers. The recent acquisition of Nimble Droid allows HeadSpin to evaluate application performance on both the client and server side with high accuracy. HeadSpin can provide accurate and detailed insights to developers about the bottlenecks in application execution that are hurting its performance and thereby user experience and revenue potential. Nimble Droid helps you pinpoint elements that are hurting your application performance. It allows you to gather deeper insights about what should improve on the application side (leave aside network and other factors) to deliver highly competitive (remember Insta, WhatsApp) application performance. It also allows you to track the progress or deterioration that happens to application build to build. The Nimble Droid dashboard clearly measures the improvement/deterioration in performance build over build. This helps eliminate performance regression, as features get added and enhanced. With Nimble Droid integrated into the development environment, developers can evaluate the application for performance parameters before going to production and waiting for feedback from customers. Instead, every time a build is made, developers have deeper insights about what should be fixed or modified at code level to achieve desired performance. There are three key advantages to using

HeadSpin: Additionally, there are four key lessons we learned would improve performance: Encouraged by customer results, we're beginning to focus our efforts on exploring the relationship between improving performance and engagement. We strongly recommend customers to continue to monitor every critical user journey (CUJ) for every pull request to detect any performance regressions. With such unified cross-platform performance metrics, application developers can set shared goals for a consistent enduser experience on all client apps. Quality-Driven Design - Production Insights Today, enterprises are becoming increasingly aware of the need for quality-driven design for supreme customer experience and 100% uptime. Design inputs from production via quality engineering can significantly transform an application's customer experience and performance. Enterprises that leverage such design inputs have a clear edge over competing products that rely only on business for design inputs. Qualitydriven design provides enterprises with detailed insights about what's happening behind the scenes. It can identify factors that could be hampering customer experience real time. Quality-driven design helps improve application experience continuously and rollback releases that are degrading customer experience while adding new functionality. These insights also translate to design requirements for upcoming releases as these insights are derived from real-time customer interaction on production releases. HeadSpin's AI-powered Application Performance monitoring Platform allows enterprises to continuously monitor applications from multiple geographies and understand potential bottlenecks, issues and areas for improvement. This platform observes application transactions from cities, networks and devices of interest and comes up with a holistic view of application performance. It clearly calls out various factors contributing toward application slowness and poor UX experience. Headspin has a presence in 150 cities across 100 countries globally. This allows enterprises to run tests from any city of their interest based on their customer base. A leading US retailer leveraged the application-monitoring platform to analyse its application in production from three different cities for its effectiveness and for areas of improvement. During this exercise, they had numerous observations like duplicate image downloads, repeated pings by third-party SDK calls, and UX blocking the content from rendering on time. All these were having an adverse impact on customer experience. It could also identify an improvement area in image management, which could potentially save 50,000 USD per month by improving the payment experience. Challenges and lessons learned Cross-platform metrics measurement requires an extensive collaboration of developers from multiple clients. backend, and data teams. There are numerous challenges during the process: Here are some lessons we have learned so far from tackling these challenges. Business objective-driven workflow Working backward from mock analytics and a mock dashboard is super helpful to define the data format and to decide upon a reasonable range of stats. Have an expectation of what is normal and what is not. For example: What range should the metrics stats fall in? What possible values should metadata have? What should the distribution of metadata values be? If anything falls out of range, it could indicate either a tracking error or an actual performance problem to be addressed. Identify leads to follow through and make decisions. Since this work involves multiple teams on several metrics over a relatively extended period, it's important to have directly responsible individuals

leading the decision-making process. Try to pair up developers from each platform to work on the same metrics at the same time, and minimize the chances of developers joining or leaving the project as this can introduce friction. Invest in processes and tooling It's essential to track the metrics updates as soon as changes are deployed to tighten the feedback loop. This process will be much smoother with investment in real-time debugging tools on all platforms; it's impractical to wait for 2-4 weeks for production data to verify the validity of data, especially for the mobile release cycle. You need to be able to detect tracking errors and performance trends both locally and on dog food or beta builds. Early knowledge sharing and training There will be knowledge gaps for client developers to understand how other platforms work: how data is sent, formatted and stored in the data warehouse and the most efficient way to organize, query data and set up dashboards. It's beneficial to encourage and coordinate knowledge sharing to get on the same page and avoid surprises down the road. The Future With unified cross-platform performance metrics, application developers can set shared goals for a consistent end-user experience on all client apps. This isn't the end of the story for metrics measurement improvements, though; we're working on automated performance testing and regression detection, along with adding more granularity to metrics during app sessions and on specific user actions. It's just the beginning for the cross-platform performance metrics to mirror our users' experience and help us make every app faster. Summary Digital requires continuous testing and monitoring to ensure customer loyalty. It's no more a scenario of design, develop, test and release. The advent of new technologies and tools has made continuous monitoring easier and more comprehensive. Modern digital testing tools can gather deeper insights about the application experience and performance from production. Enterprises with a focus on digital revenue shall leverage appropriate technology and tools that allow them to ensure best-in-class experience to their customers. HeadSpin, a Silicon Valley Technology Startup based out of Mountain View, California, is a technology partner for Wipro's Quality Engineering & Testing Practice. Wipro Ventures has also made an investment in HeadSpin. Industry: Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

### An introduction to a 20-year-old concept: Inner source

----- Arcticle source ----- https://www.wipro.com/blogs/gilles-gravier/anintroduction-to-a-20-year-old-concept-inner-source/ ----- About the Author Contact Wipro Related Blogs Sustainability and Resilience with Open Source: A Natural Fit What Success in the Next Normal Looks Like The 5 Business Trends Shaping the Next Normal Please fill the required details to access the content An introduction to a 20-year-old concept: Inner source June | 2019 Back in December 2000, Tim O'Reilly, the founder of O'Reilly Media, coined the term "inner source" in his response to Matt Feinstein on Open Source and OpenGL. Back then, his definition of inner source was "to use open source development techniques within the corporation, or with a cluster of key customers - even if they aren't ready to take the step all the way to releasing their software as a public open source project." In twenty years, things haven't changed much. The definition of inner source is still pretty much the same, but now organizations are heading down the inner source road for much more strategic reasons than just not being ready to go open source. Actually; inner source is seen as a means to significantly enhance the software development process of a large development environment by enabling distributed teams to develop software inside the corporate firewall in a much more efficient way than otherwise possible with conventional methodologies. At the core, leveraging the best practices of highly efficient, globally distributed open source projects will naturally yield the typical benefits that open source projects already enjoy. But inside the corporate walls, this also enables teams that are not used to working together (e.g. multiple agile teams spread across several countries) to contribute code to a common codebase, turning a potential distributed agile nightmare into an efficient elegant reality. Furthermore, when you encourage a diverse group of people to contribute to a common codebase, something excellent happens: Innovation. As Bill Joy, the co-founder of Sun Microsystems once said: "Innovation happens elsewhere." You're going to get a lot more innovation by encouraging out-of-the-box thinking, and the best people to think out of the box are the ones that are located outside your own box. Getting teams from different locations, contexts, even cultures to contribute to your software development effort will produce new ideas, faster and more consistently than one single team would come up with. In the inner source approach developers can participate as much or as little as they can, based on the amount of time they can allocate and what they need or want to see in the project. This model of contributing based on need and availability enables an extremely efficient usage of time without requiring complex time management processes. And, the resulting increased speed of development drives much faster time to market and production of your internally developed code and - counterintuitively - with fewer bugs and defects. Of course, you can only benefit from all of this if you put in place the right models for your development teams to work together. Your project governance, typical open source meritocratic structure, separation between contributors and committers, code reviews, community leadership and tools,

and technologies to provide frictionless development. Using internal and external crowdfunding or gig-economy mechanisms to encourage initial contributions are additional methods to get you going efficiently. Large, successful organizations such as PayPal and Capital One have strong inner source activities and are sharing their best practices as part of industry working groups to help other businesses be successful. So, when is your organization going to start its own inner source program? Industry: Gilles Gravier Director, Open Source Consulting Practice, Wipro Ltd. Gilles Gravier is Director in the Open Source Consulting Practice at Wipro. Based in Switzerland, he provides open source and blockchain strategy consulting and advisory services to Wipro's key customers worldwide. Gilles has always been involved in both security and open source. In particular, in roles such as Chief Technology Strategist for Security and Open Source at Sun Microsystems, he has advised the largest accounts globally on their IT security strategy and their open source activities. The world is leveraging open source to drive innovation. But, what to do if you can't open source? Inner source. Here's how companies' relationships with their customers, workforces, and supply chains will change as they adapt holistically to the new normal post-COVID. Several consumer and business trends will converge to shape the post-pandemic business world, but agility and digital 

# Driving innovation and competitive differentiation through Inner Source

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use or would use this specific feature. So, they have a vested interest in contributing very high-quality code because it makes sense to them. Inner source processes also have an added benefit that they enable globally distributed teams to work locally, contributing in a local agile model to their specific portion of code, creating, in effect, a distributed agile model. So, in addition to bringing in ideas from a diverse population, you also benefit from more modern development methodologies like agile or DevOps in a distributed mode. Just like normal software development methodologies. make sure you have a dedicated code review and, just like normal open source, make sure you have separation between contributors (people who write code and submit /contribute it to the project) and committers (people who approve code that has been contributed, and have gained that privilege over time through the regularity and quality of their own contributions). Inner source, like open source, leverages a meritocratic model that favors quality. To do this, an organization must follow globally established best practices. There is a lot of literature on inner source. One of my favorite sources is this site:https://innersourcecommons.org/getting-started/ which will provide insights on best practices, communities where you can share knowledge and information, and even events where like-minded people get together to share best practices. Remember that in the corporate world, innovation usually serves to bring your organization and/or your products faster to a unique differentiating set of features before your competition does; so, new ideas and speed of execution are crucial. Inner source brings both to you, without sacrificing on quality. Industry: Gilles Gravier Director, Open Source Consulting Practice, Wipro Ltd. Gilles Gravier is Director in the Open Source Consulting Practice at Wipro. Based in Switzerland, he provides open source and blockchain strategy consulting and advisory services to Wipro's key customers worldwide. Gilles has always been involved in both security and open source. In particular, in roles such as Chief Technology Strategist for Security and Open Source at Sun Microsystems, he has advised the largest accounts globally on their IT security strategy and their open source activities. The world is leveraging open source to drive innovation. But, what to do if you can't open source? Inner source. Here's how companies' relationships with their customers, workforces, and supply chains will change as they adapt holistically to the new normal post-COVID. Several consumer and business trends will converge to shape the post-pandemic business world, but agility and digital 

### Sustainability and Resilience with Open Source: A Natural Fit

---- Arcticle source ---- https://www.wipro.com/blogs/gilles-gravier/ sustainability-and-resilience-with-open-source-a-natural-fit/ ---- About the Author Contact Wipro Related Blogs What Success in the Next Normal Looks Like The 5 Business Trends Shaping the Next Normal Six Reasons Open Source Is the Tool for Now Please fill the required details to access the content Sustainability and Resilience with Open Source: A Natural Fit February | 2022 Open source has been around for decades, most often

applied to software, but also to hardware, food recipes, houses, cars anywhere blueprints or plans can be equated to source code. As a software development model, open source allows users to access the software's source code, modify it to suit their needs, even redistribute it. Software that is made available as open source comes with a license which defines exactly what permissions and obligations a user has, should they want to redistribute that software as is or modify it before sharing. Open-source software can be collaboratively developed by a community, or by a single vendor who completely drives the product agenda. In an open source community, members fix bugs and add features as needed. By modifying the software to fit their needs, open-source communities are able to deliver high-quality, user-centric innovation much faster than proprietary software can. And because these communities can be more distributed and diverse than development studios or in-house teams, the modifications to the software tend to be more inclusive, addressing the specific needs of users from different backgrounds and geographies. The way open-source communities operate naturally leads to efficient, resilient teamwork that delivers high-quality products in a sustainable manner. What makes opensource resilient & sustainable The distributed, user-driven approach of open source community projects can have a significant impact on project resilience, which the ISO 22361 standard defines as the ability of an organization to absorb and adapt in a changing environment. In 2018, the HAL-Inria team published a paper on this subject in which they shared their Open Source Software Resilience Framework (OSSRF), designed to measure the resilience of an open-source project across various quantitative parameters: The quantitative parameters are really interesting because they can be measured from the outside, by observing the project. This means that even if you are not a member/participant of a project, but just a potential user, you can observe the project and decide if it meets your needs. Sustainability is a natural biproduct of the way open-source teams work and is closely linked to resilience as each depends on the other to be achieved. Open-source contributors, the people who actually write code/ documentation or participate in the open-source community, do this because they have an interest in it. They use the software and want to make it better by fixing or adding things to get the exact experience the need. The energy spent by the development community is directly driven by the members' interest in enhancing the software and the return they expect on those enhancements. As long as there is interest, the energy to drive the project will be optimized for just the amount of work needed only when it is needed. Compare this to proprietary software, or even purely commercial open source models in which software is constantly being worked and new features are being added — features which may or may not be useful for the end-user. This non-stop development can be hard to sustain without increasing prices to fund it. Further proof that open source aligns with sustainability goals is that some very visible projects such as the Green Software Foundation run their activities directly as open-source projects, for their produced code as well as for their documentation and code, and host it on a public repository for all to contribute. When designing a software project for the long term, it's important to consider developing in an opensource model to allow the project team (vendor or community) to benefit from all of the natural and structured elements that will support and strengthen its sustainability and resilience. Industry: Gilles Gravier

#### Rahul Sarda

### Unified data management with Delta Lake

### and Google Cloud

----- Arcticle source ----- https://www.wipro.com/blogs/rahul-sarda/unifieddata-management-with-delta-lake-and-google-cloud/ ---- About the Author Contact Wipro Related Blogs AI Driving 5G Innovations for Communications Service Providers Making ML Models in Banking Resilient using Adversarial Attacks Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Please fill the required details to access the content Unified data management with Delta Lake and Google Cloud November | 2019 A global consumer goods company was facing acute business challenges such as delayed product recommendations, deferred billing and SLA non-compliance despite 1000+ node big data cluster. The firm had a storage of 23 petabytes of data with transaction tables as large as 90 TB, with billions of billing transactions that had to be traced while amending or cancelling any order. The 18-step discovery process with 20+ tables, that had to be joined, was becoming very inefficient. Furthermore, each business transaction was a multi-record transaction requiring time travel and backpropagation, and hence a complex match and merge logic. This is a common challenge faced by global organizations wherein traditional data lakes fall short. What comes to the rescue in such a scenario is a Delta Lake integrated with a highly scalable and tuned cloud solution. Architecting data pipeline with Delta Lake and Google Cloud Delta Lake, an

open source storage layer, incorporates ACID features in data lake, along with time travel, history tracking, metadata management, and governance. This collection of libraries and routines can leverage Amazon's Simple Storage Service and Hadoop Distributed File System (HDFS) as default storage layer. Google Cloud Platform (GCP) can be used for the same. Figure 1 depicts how GCP and Delta Lake can be leveraged to build a unified data processing and consumption layer. Figure 1: A unified data processing and consumption solution built on Google Cloud and Delta Lake Creating single data narrative The different layers of the unified data processing solution (Depicted in Figure 1) are Data Sources: The source data for a typical billing schema consists of tables such as Unified Data Platform Setup: Delta Lake leverages Spark framework for its processing. Google's Dataproc comes with built-in Spark installation. It also has built-in Google Cloud Storage (GCS) connectors that reduce the deployment time considerably. Appropriate version of DataProc instance should be deployed and appropriate decencies should be added to pom file. Unified Data Ingestion & Processing Layer: This layer can be developed using tools such as Google's DataFlow or Delta enabled ETL tools like Talend Unified Data Layer: The GCS buckets can be configured as storage layer for Delta Lake. The core business data gets stored in parquet format and logs will be maintained in json format. Further, to optimize query performance at this layer, data can be collocated using transaction-date based optimization and z-ordering on kev fields such as order-codes/ cancellation-codes etc. This layer will be able to enable full ACID compliance with highly optimized querying / time travel on the data. Unified Data Consumption Layer: Based on the nature of the data and access requirements, Google's BigQuery and BigTables can be leveraged as the storage layer. Effective data management Organizations need actionable data. To fit the bill, data must provide a single version of the truth along with full governance capability. The enables decision makers to trust data and make insightful decisions. Delta Lake along with GCP provides an effective way to manage and control data. Industry: Rahul Sarda Distinguished Member of Technical Staff at Wipro. He has over 20 years of experience with deep technology and functional domain expertise. He has helped organizations across industry verticals develop value propositions for faster time to insights. Ajinkya Chavan Google Certified Professional Data Engineer. He has over 18+ years of IT experience in the areas of analytics in architectural and consulting positions. His areas of expertise include Big Data, Cloud, DWH, ETL, Data Migration etc. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the source ---- https://www.wipro.com/blogs/danesh-hussain-zaki/ ---- Contact Wipro Blogs By Author Please fill the required details to access the content Danesh Hussain Zaki Danesh Hussain Zaki DMTS Senior Member, Wipro He

#### **Andrew Aitken**

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#### Ravi Purohit

----- Arcticle source ----- https://www.wipro.com/blogs/ravi-purohit/ ----- Author's Posts Contact Wipro Please fill the required details to access the content Ravi Purohit Vice President & Global Head, Oracle Service Line, Wipro, Ltd. In his current role, Ravi is responsible for driving growth and P&L for Oracle within BAS and drive Oracle global partnership and Wipro's Oracle ecosystem success to a next level. Ravi brings a strong expertise and experience in IT service delivery, domain, technology and industry of around 22+ years, of which the last 20+ years have been with Wipro. In his previous role, as the Global Head for Presales and Integrated Services for Business Application Services (BAS), Ravi has been instrumental in establishing BU aligned integrated presales team across BAS. Ravi has been responsible for "Lead to Order" in Apps including demand generation, solution definition and proposals for multi-practice large deals, service integration and sales transformation initiatives. Ravi has played several key roles in the past. He has led Retail & CPG business for Wipro in EMEA, Latin

## How to future-proof your cloud adoption roadmap?

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technologies - AI, ML, Blockchain, IoT, etc. - into cloud environments enables organizations to drive additional value from their cloud applications (enterprise resource planning, enterprise performance management, supply chain management, human capital management, etc.). With a cloud strategy tightly integrated with emerging technologies, organizations can empower customers, improve asset and employee productivity, enhance transparency across the value chain, and meet compliance requirements. The questions to ask are relatively simple: Will your cloud applications and processes easily integrate with advanced technologies? Will your cloud strategy accelerate your AI, AR, IoT and Blockchain vision? If not, it may be best to take a pause and reconsider your options. Industry: Ravi Purohit VP & Global Head, Oracle Service Line, Modern Application Services, Wipro Ravi brings about 22+ years of strong expertise and experience in IT service delivery, domain, technology, and industry. He is a certified Six Sigma black belt, and has deployed several Six Sigma techniques for global clients. He has been a speaker at leading industry forums such as NRF, GMA, Oracle Open World and CII forum. He holds an MBA from IIM Bangalore and a Bachelor's degree in Electrical Engineering from IIT Kharagpur. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

===========================----- Arcticle source ----- https:// www.wipro.com/blogs/chaitanya-k-naga/ ----- Author's Post Contact Wipro Please fill the required details to access the content Chaitanya K Naga Chaitanya K Naga Manager - Open Innovation Chaitanya K N is a Manager in the Open Innovation team at Wipro. He interacts with the startup ecosystem to bring startup innovation to Wipro and enables alliance management with a portfolio of startups across industries. He has developed and implemented a startup evaluation framework - 'Wipro Lens', which measures a startup from the perspective of 'innovation potential' it offers and its 'alignment potential' with Wipro's offerings. Chaitanya is an alumnus of IIM Bangalore and holds bachelor's degree in Mechanical Engineering from JNTU College of Engineering in Hyderabad.

# 5 Steps to Building Successful Partnerships between Startups and Large Enterprises

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between Startups and Large Enterprises March | 2021 Collaboration is essential in a world led by a constant quest for innovation. Large enterprises and startups need each other to survive and thrive in this rapidly changing digital landscape. Their strengths, weaknesses and differences, when brought together, create a win-win situation. Many large enterprises are tapping into the startup ecosystem, which is evident by the rapidly increasing number of startup accelerators, incubators, and corporate venture arms of large enterprises. Strength of startups lies in agility and innovation, and that of large enterprise, in its brand equity, stability, and maturity in handling business. By design, startups are small and tend to be agile in decision-making. They rely on innovation, and do not hesitate to pivot and guickly change their course if required. Large enterprises have well-defined organizational policies on every aspect of business operations, be it sales, operations, finance, and last but not the least, culture. Onboarding the agility of a startup into the regular functioning of a large enterprise is not a straightforward task, given the different mindsets of the involved stakeholders. Some large enterprises are successful in onboarding startup innovation into their regular operations with great outcomes for both parties. In this article, we look at some of the critical enablers for successful partnership between startups and corporates. Enablers of successful corporate-startup partnership Trust Building trust between stakeholders is a key success factor. Startups tend to be suspicious about the motives of large enterprises and apprehensive about outcomes. Transparency and clear communication on how and why a particular startup solution is being explored should be made clear by both parties, of course, after ensuring proper legal protection to the conversations through execution of mutual Non-Disclosure Agreements. Increasingly, large enterprises are designing appropriate joint operating models and right contracts that sufficiently address the concerns of a startup. Plan beyond the proof of concept Any innovation solving a pain point may instantly get the attention of enterprise stakeholders. Proof of concept becomes an immediate next step for both parties to estimate the benefit generated. Successful relationships have a clear plan on how to operate post PoC. Some of the questions worth answering at this stage are: Governance Human relationships get better with frequent meaningful connects and respecting the differences. Startup-corporate partnerships that have already passed the two factors -- Trust and Plan beyond PoC -- need a good governance mechanism to enhance collaboration. The governance mechanism should be based on the underlying strengths of both parties and harness the abilities generated when these strengths are effectively combined Large alliances require attention from the senior most leadership of startups -- at least in the initial stages. Also, monthly connect between both parties should be good to start with in the initial stages. As joint business takes off, more frequent connects (weekly, biweekly) becomes inevitable to enable smooth operations. An informal channel between both parties to connect on-demand helps significantly in the initial stages as this is the time both parties are learning about each other. Capability and capacity building Anything new involves training and capacity building. A clear quarterly plan on how to train identified people in both organizations on the new capability building, certification programs and recognition of new achievements is vital for organic growth of joint relationship. Dispute resolution In the process of relationship going from 'zero to one', some disputes on how to conduct joint

business may arise. A clear plan to recognize sources of dispute early and have remediation mechanism with appropriate escalation matrices in both organizations is key in handling tough situations. Winning with collaboration Several interdependent factors make a startup-corporate partnership successful. It would take 2 to 3 quarters in getting all factors in place. However, once enabled, both organizations maximize growth opportunities and share great benefits. Using the experience built over years in working with the global startup ecosystem, Wipro can help build successful outcomes through effective partnerships between innovative startups and large corporates. For more information, kindly reach us at open.innovation@wipro.com Chaitanya K Naga Manager - Open Innovation Chaitanya K N is a Manager in the Open Innovation team at Wipro. He interacts with the startup ecosystem to bring startup innovation to Wipro and enables alliance management with a portfolio of startups across industries. He has developed and implemented a startup evaluation framework - 'Wipro Lens', which measures a startup from the perspective of 'innovation potential' it offers and its 'alignment potential' with Wipro's offerings. Chaitanya is an alumnus of IIM Bangalore and holds bachelor's degree in Mechanical Engineering from JNTU College of Engineering in Hyderabad. ==============

----- Arcticle source ----- https://www.wipro.com/blogs/keith-simmonds/ -----Contact Wipro Blogs By Author Please fill the required details to access the content Keith Simmonds Keith Simmonds Senior Manager, Strategy & Transformation, Consulting Practice, Wipro Limited Keith Simmonds is an experienced practicing consultant with a demonstrable track record of successfully delivering technology enabled transformation programs in different industries. Get in touch: global.consulting@wipro.com www.wipro.com/blogs/prateek-chowdhry/ ---- Contact Wipro Blogs By Author Quantum computing and manufacturing application Please fill the required details to access the content Prateek Chowdhry Prateek Chowdhry Senior Consultant - Manufacturing Digital Practice Prateek is an MBA graduate, with over 5 years of diverse experience in automotive product development & business development for digital solutions. He is responsible for building the opportunity pipeline and enabling sales for "Connected themes" for manufacturing accounts. Prateek was also instrumental in conceptualizing the Connected Commerce Solution. He was recognized for his special contribution toward Digital Practice Building for the Manufacturing BU. Prior to Wipro, Prateek has worked in R&D of Connected Cars & Augmented/Virtual reality products, with various Auto Tier 1 Suppliers. Manufacturers have been talking about developing manufacturing and delivering customer-centric products since the beginning 

## Quantum computing and manufacturing application

----- Arcticle source ----- https://www.wipro.com/blogs/prateek-chowdhry/ quantum-computing-and-manufacturing-application/ ---- About the Author Contact Wipro Related Blogs Partner Automation is Key to Maximizing the Manufacturing Ecosystem Three Ways to Optimize the Supply Chain to Become Customer Centric Five ways manufacturing companies can boost profitability Please fill the required details to access the content Quantum computing and manufacturing application August | 2019 Manufacturing Setup Manufacturers have been talking about developing, manufacturing and delivering customer-centric products since the beginning of the Era of Manufacturing. With time, customer expectations have evolved and manufacturers have been left with no choice but to keep abreast of their facilities to address customers. However, recently, there has been a shift in customer mindset, from buying a customizable product to subscribing to a personalized service. Customer Mind-set change This shift leaves manufacturers with little option but to create products to meet the different needs of each consumer in the target segment. Focus on Hyperpersonalization or 'Lot size 1' is increasing the complexity on the supply chain networks. This has put tremendous stress on developing advanced planning, scheduling systems to administer raw materials in real time to rapidly changing manufacturing priorities. Any inertia in time to market can significantly affect orders and lead to unprecedented losses. Identifying the challenge with Status Quo In today's world, technologies such as AI & ML are bearing the load of such advanced planning systems and making them intelligent. With connected machines and integrated processes, AI & ML powered solutions will need more computing power to handle data with higher velocities and variability to generate real-time outputs. Large Manufacturers govern a lattice of warehouses, logistics hubs and distribution centres spread out across the globe. In addition, they have a panel of sub-manufacturers, which bring in parts and components. These network nodes are not static in nature and change frequently because of new markets, acquisitions or partnerships, changing supply cluster or customer segments. The versatility of such networks brings in the complexity in their management. The current inventory production and supply chain planning solutions have started to fall short because a. Schedulers have to change the optimization schedule too frequently in real time and perform dynamic inventory allocation and production planning. Each modified, added or deleted node changes the complexity and the planning systems take longer to generate results, sometimes even a day - to put things into perspective, consider an hour's delay for a plant producing \$ 1 Mn worth products in an 8-hour shift. This would hit the throughput significantly. b. Planners often have to run multiple "if-this-then-what" simulations to ensure that production does not stop. These simulations help with a best-fit plan to accommodate a change in order, or fulfilling a pending backlog for a priority customer or sometimes even to build a prototype to

support a marketing request. The complex network simulations usually take more than an hour to churn out a plan. With decreasing cushion time between 2 job stations on a shop floor, an hour's wait will result in nothing but losses. Imagine a situation where a business has to ship products through 5 trucks on 20 possible routes. This means the planners have to choose the best from 205 or 32,00,000 options. Such problems can be solved with the current processing hardware in no time but if we increase the trucks to 100 (common case for a manufacturer) the possibilities become humungous and to choose the optimized route, the planners also have to consider data like traffic, weather, vendor capacity, production plans, etc. Clearly, a classical computer will take time to handle such simulations. The Hero: Quantum Computing Quantum computing guarantees to cater to such challenges that manufacturers will soon face. This is because Quantum computers can solve complex problems with extremely high speeds.[2] The main idea of quantum computing is using Qubits. Qubits, unlike normal bits, can possess 0,1, or both states simultaneously. Let us understand how quantum computing can help. Take 2 complex numbers - x & y. The property of being able to exist in multiple states is called superposition. Quantum physics doesn't allow us to measure the value of two numbers, instead when we measure a qubit we get the state 0 with a probability |x|2 and 1 with a probability of  $|y|^2$ . The sum of both the probabilities should be 1. So when a quantum operation is performed on a qubit, it must be performed on all the states simultaneously. [1] Simply put, a qubit x(1) + y(0) can hold multiple states between 0 & 1, but when measured it will be either 1 or 0. This means a single operation can be carried out on 2n values simultaneously. How it helps Now, what does this mean for our optimization problem at hand? In classical computing, these problems have to be solved through calculating permutations and comparing them one at a time. Because of qubits and superposition property, quantum computing will apply the given operation to all possible states represented by a gubit. Instead of zillions of operations, one at a time quantum computing can reduce the number of iterations, thereby significantly reducing time to find the best-fit plan guicker than classical computing. References: [1] Michael A. Nielsen and Isaac L. Chuang, Quantum Computation and Quantum Information: 10th Anniversary Edition, Cambridge University Press; 10th Anniversary ed. Edition [2] https://www.tomshardware.com/news/ibm-guantum-computersfaster-classical, 37957.html Industry: Prateek Chowdhry Senior Consultant -Manufacturing Digital Practice Prateek is an MBA graduate with over 5 years of diverse experience in automotive product development & business development for digital solutions. He is responsible for building the opportunity pipeline and enabling sales for "Connected themes" for manufacturing accounts. Prateek was instrumental in conceptualizing the Connected Commerce Solution. He was recognized for his special contribution towards Digital Practice Building for the Manufacturing BU. Prior to Wipro, Prateek has worked in R&D of Connected Cars & Augmented/Virtual reality products, with various Auto Tier 1 Suppliers. Manufacturers were once many steps removed from their customers, with wholesalers and distributors providing a crucial link to sales. With the titanic shift that has occurred in business, only customer-centric companies will survive. Manufacturing companies are under pressure. Cost of raw materials is rising, while increased competition is driving down end user pricing. Salaries are rising at a level that manufacturing automation alone

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cannot absorb and the race to acquire talent is increasing. This forces
manufacturing companies to find other ways of boosting profitability.
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Future: At the Intersection of 5G, Cloud, Data & Networks | Wipro Please fill
the required details to access the content Milan Rao Milan Rao President -
Marketing, Innovation & Technology, and Global Head - Manufacturing &
Communications Business Milan Rao is currently President at Wipro. He
heads Wipro's core transformation office - MIT, or Marketing, Innovation
and Technology - that is driving Wipro's business transformation and has the
charter to develop transformative technology solutions. Milan oversees the
CTO Office which is Wipro's innovation and R&D hub, and defines the
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two of Wipro's businesses globally - Manufacturing and
Telecommunications, driving digital transformation across the value chain
for Process & Industrial Manufacturing businesses, Automotive, Aerospace
and Defense. Milan is part of Wipro's Corporate Executive Committee. His
multi-industry leadership and business experience - from technology,
healthcare to telecom and financial services - positions him uniquely to
contribute to the ongoing transformation in the industry and at Wipro. In
response to COVID-19 and its rippling impact across the globe, The Global
Business Alliance (GBA) -- a trade association representing international
companies doing businesses in the U.S. -- has launched a five-part video
series titled "Jumpstart American Jobs." COVID-19 changed the game for
everyone. Traditional ways of working were thrown out the window as
business leaders across the globe embraced technology with great urgency.
Wipro's Milan Rao and AT&T's Mo Katibeh recently discussed the future of
IT infrastructure and its impacts on 5G, cloud computing, data and more.
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Wipro Please fill the required details to access the content The
Infrastructure of the Near Future: At the Intersection of 5G, Cloud, Data &
Networks | Wipro June | 2020 The COVID-19 crisis became a decisive push
for digital transformation. This global health, humanitarian, and economic
crisis accelerated the shift towards digital and demanded that firms truly
digitize their businesses from end to end: how they operate, how they
develop and adopt collaboration solutions for employees, and how they serve
their customers. The next step will be to deliver that next-generation
customer experience through 5G and connected technologies. With
impressive speeds, far fewer latency issues, and increased reliability, 5G will
put digital transformation on steroids. Major communication service
providers in the United States like AT&T, Verizon, and T-Mobile are getting
ready to power this shift and have launched this new generation of
telecommunications technology. But what's next? Recently, I discussed the
future of connectivity, digital experiences and the digital infrastructure at
play with Mo Katibeh, President and Chief Marketing Officer for AT&T
Business. Here are some insights into how we see the shift in digital
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infrastructure that will set up these extremely low-latency, resilient networks for unparalleled connectivity between people, devices, and "things." 5G is a global agenda. The three global priorities for 5G deployment are universal connectivity, radically de-centralized edge computing, and a massive increase in data collecting capabilities, together facilitating next-gen smart systems. But make no mistake, digital infrastructure is just infrastructure! 5G-led transformation will overhaul both business models and delivery models. Companies will need to think about transformation down to the core of their business using what we call the "4M approach": model, method, machinery, and mindset. The Cloud is coming closer. The biggest change in the future of IT infrastructure is now underway: the reorientation of cloud computing alongside 5G's rollout. As Katibeh explained, to enable extremely low latency connections, networks and computing must move closer to the end user. This means we will see smaller, more distributed data centers across the globe, closer to all major cities. To get 5G networks, edge computing, and wired fiber connections to work together, as well as bring a low-latency experience to end users, infrastructure will have to be integrated. The need of the hour is for these fiber connections, 5G technology, and the Internet of Things to come together and hit the cloud computing stack quickly to bring alive a lowlatency experience for consumers and businesses. 5G will act as the network broker for everything. 5G and edge computing will eventually become the brokers that interface between all elements - people, devices, and the cloud. Katibeh agrees. He believes that automation and machine learning layers will apply to these connected ecosystems and enable intelligent decisionmaking in the future. "The fabric of commerce in our society will be shifted in the coming years by 5G," Katibeh said. Another angle to consider is the massive amount of data that will be generated through this connected ecosystem, as well as the data protocols, security, governance, and analytics capabilities required to manage and make use of this data. This scenario poses both a challenge and an opportunity. How companies aggregate, process, organize, and analyze this data will be key to developing and delivering superior customer experiences. Back to the future: Will everything be software defined? Yes. Like LTE, 5G requires a physical infrastructure build. The difference, though, is that 5G will require everything to be software defined and virtualized. From infrastructure to storage, computer to network, application to experience, expect everything to be software defined. Interestingly, this future will involve a massive ecosystem play. How firms deliver cloud infrastructure, network infrastructure, storage, intelligence, and security -- all at once -- will no longer be just a network or CSP play, but an aggregate ecosystem play. This is where technology providers like Wipro can help. 5G is not just a telecommunications advancement. It's a set of software advancements that have been fully integrated into a set of wireless standards like never before. The future of IT infrastructure, as I see it, will be everything wireless, coming together. What do you think? Milan Rao President - Marketing, Innovation & Technology, and Global Head - Manufacturing & Communications Business Milan Rao is currently President at Wipro. He heads Wipro's core transformation office - MIT, or Marketing, Innovation and Technology - that is driving Wipro's business transformation and has the charter to develop transformative technology solutions. Milan oversees the CTO Office which is Wipro's innovation and R&D hub, and defines the

company's technology vision and strategy, as well as incubates next-generation technology and service offerings. Milan provides direction to Topcoder, as well as to the global Marketing function. Milan also heads up two of Wipro's businesses globally – Manufacturing and Telecommunications, driving digital transformation across the value chain for Process & Industrial Manufacturing businesses, Automotive, Aerospace and Defense. Milan is part of Wipro's Corporate Executive Committee. His multi-industry leadership and business experience – from technology, healthcare to telecom and financial services – positions him uniquely to contribute to the ongoing transformation in the industry and at Wipro.

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## COVID-19: The Definitive Push to Digital Transformation

---- Arcticle source ---- https://www.wipro.com/blogs/milan-rao/covid-19-thedefinitive-push-to-digital-transformation/ ---- About the Author Contact Wipro Recently, I had the opportunity to join Constellation Research CEO R "Ray" Wang and Salesforce Chief Digital Evangelist Vala Afshar on their weekly web series DisrupTV. During part of the discussion, we touched on how the COVID-19 pandemic is reshaping our world, and I wanted to dive more deeply into one particular aspect: the definitive push toward digital transformation. For years, we've had digital technology capable of transforming how we work and live, but it took a global crisis for many to embrace that technology wholeheartedly. A worldwide shift in thought Embracing change amid uncertainty So we went remote. How does technology change now? Related Blogs Metaverse: Business Implications, Monetization Models and Adoption Challenges How blockchain can hackproof a supply chain Agility is Hard Because Its Soft Please fill the required details to access the content COVID-19 The Definitive Push to Digital Transformation June | 2020 At the outset of 2020, technology's latest offerings held exciting possibilities and potential. Advancements like blockchain, artificial intelligence, 5G, and other technologies were poised to become part of our daily personal and business realities. However, societies across the globe still held an affinity for in-person experiences. For many industries, regardless of the available technology, human interaction was preferred: in-person classes for education, office working for business, and shopping in store for retail. Digital and virtual options were a convenient alternative -- but only when needed. In a matter of days, though, COVID-19 changed the game for everyone. Traditional ways of working were thrown out the window as business leaders across the globe embraced technology with great urgency. Entire offices shifted to remote working structures, supply chains broke, and businesses rethought entire strategies, even their business models. As much as these shifts pushed back the "in-person" mindset, they also created a ripple effect that has already changed our world. The digital transformation glass ceiling had been shattered! As our world's status quo disappeared on virtually every front, so did our needs. People went from needing things like public transportation and dry cleaning to grocery deliveries and personal protective equipment. Meanwhile, business needs shifted from operating a physical office to implementing secure remote working infrastructures and collaboration tools. Change didn't stop with operational shifts, though. As people began settling into their new versions of "normal," many quickly discovered unforeseen positives that had previously been written off. Options that were originally considered less desirable -- like remote working or online schooling -quickly became our saving grace. But beyond that, many people and organizations realized that these options are often better for certain scenarios and for certain types of employees. Hopefully, COVID-19 will be a distant memory one day, but companies like Twitter have already announced permanent work-from-home arrangements, and this is only the beginning. We're feeling the rumblings of what will become our world's greatest change -- a change in status quo. With companies forced to become more digital, where do we go from here? I see three steps we need to take. First, we need to build trust. As digital technology continues to advance and change the ways we work and live, it's up to industry leaders to establish and maintain trust. Organizations who handle data must continue protecting it fervently. Data protection, cyber security, and risk management are key. Blockchain solutions that promote trust and transparency, such as identity protection and verification, will be pervasive. Next, we must prioritize innovation. For many organizations, innovation departments have been nonexistent, an afterthought, or cut off from the rest of the business. Now, many leaders of those organizations are embracing a dynamic outlook and industrious perseverance that will not only sustain us when crises emerge, but also propel us forward as we seek new ways to work, create value, and even change business models. AI and ML will be more embedded; digital and design will help build new user interfaces and experiences; interactive experiences like AR and VR will enable new ways of buying, selling, and servicing. Last and most important, we must continue putting people first. Whether it's your employees or your customers, digital primacy doesn't change the fact that people matter. This means protecting your employees when it's time to bring your workforce back to the office and creating safe environments for your customers. Examples include social distancing solutions for offices and retail, tech investments for curb-side pick-up, greater usage of drones and sensors, and robotics for factory safety. This final push for digital transformation leaves us all with room to grow. We must do so responsibly and collaboratively. For more on this and similar topics, you can watch my conversation with R "Ray" Wang and Vala Afshar on DisrupTV at https://www.constellationr.com/events/disruptv-episode-191milan-rao-jim-mckelvey-liz-miller. You can also find it on (and can subscribe or follow) Vimeo and YouTube. Then, you can also read Vala's writeup where he shares the 10 business and leadership lessons he drew from our discussion. Industry: Milan Rao President - Marketing, Innovation & Technology, and Global Head - Manufacturing & Communications Business. Milan Rao is currently President at Wipro. He heads Wipro's core transformation office - MIT, or Marketing, Innovation and Technology - that is driving Wipro's business transformation and has the charter to develop transformative technology solutions. Milan oversees the CTO Office which is Wipro's innovation and R&D hub, and defines the company's technology vision and strategy, as well as incubates next-generation technology and service offerings. Milan provides direction to Topcoder, as well as to the

global Marketing function. Milan also heads up two of Wipro's businesses globally - Manufacturing and Telecommunications, driving digital transformation across the value chain for Process & Industrial Manufacturing businesses, Automotive, Aerospace and Defense, Milan is part of Wipro's Corporate Executive Committee. His multi-industry leadership and business experience - from technology, healthcare to telecom and financial services - positions him uniquely to contribute to the ongoing transformation in the industry and at Wipro. The Metaverse is collapsing the physical and virtual worlds to create a paradigm shift in interactions between customers, suppliers, partners, employers and employees. It's every company's worst nightmare. In 2019, a global metals manufacturer experienced a ransom-ware attack in which hackers seized and encrypted its computer files, then demanded payment to unlock them. Agility as a concept has been discussed for years, though the competitive advantage of being more agile came into sharp focus in 2020. The increased pace of change, rapidly evolving customer needs, compressed timeframes for responding all of these and more drove the topic back onto every Board agenda.

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### Examining the state of U.S. manufacturing amid COVID-19

---- Arcticle source ---- https://www.wipro.com/blogs/milan-rao/examiningthe-state-of-us-manufacturing-amid-covid-19/---- About the Author Contact Wipro Please fill the required details to access the content Examining the state of U.S. manufacturing amid COVID-19 August | 2020 In response to COVID-19 and its rippling impact across the globe, The Global Business Alliance (GBA) -- a trade association representing international companies doing businesses in the U.S. -- has launched a five-part video series titled "Jumpstart American Jobs." Created to provide an opportunity for executives to share their recent insights and learnings, I was honored to join in for the first half of the second part of this series: "Making It Happen." Hugh Welsh, President & General Counsel of DSM North America; Michael Moskowitz, Chairman & CEO of Panasonic Corporation of North America; and I joined Nancy McLernon, President & CEO of the Global Business Alliance, to discuss the state of manufacturing in North America. Here are a few highlights from our conversation I want to share: Protect your people and then tackle the rest. During our conversation we landed on the common thread of caring for people. First and foremost, this included understanding what our employees needed to stay safe and continue working -- remotely when possible. This principle varied in execution from creating infrastructures and solutions enabling associates to work from home efficiently and securely to implementing job site practices with the purpose of supporting safety measures like social distancing. From a customer perspective, this involved understanding the new needs this unique situation has placed on us all. Organizations across the globe were suddenly thrust into a situation where they had to quickly and effectively identify where their supply chains were threatened most and pivot to make sure they could continue providing the goods and services necessary to support their

customers. The pandemic has accelerated technology adoption for organizations. In many ways the pandemic has forced organizations to hit the brakes on daily operations, but in other ways it has created an added emphasis on speeding up their technology adoption efforts. Prior to COVID-19 businesses pursued these changes with the purpose of optimizing how they work, but now many are tasked with implementing digital solutions like blockchain and artificial intelligence just to maintain their standard operations. Personally, I see this as an opportunity for manufacturing organizations to tackle this challenge through a "4R" approach: responsibility, which primarily hinges on providing safety for employees while also finding sustainable solutions; resiliency, which involves finding ways to not only cope with the pandemic's fallout but also find business solutions to combat it effectively using next-gen technology; reliability, which relies on leveraging digital solutions and technology to provide structure and availability for our customers; and responsiveness, which takes an active approach to both understanding and addressing the evolving needs and demands our customers are facing during this extraordinary time. We need to implement and leverage technology to empower workforces. Like I mentioned in my previous point, the COVID-19 pandemic has accelerated the technology adoption efforts for businesses in every industry across the globe. But merely implementing technologies like blockchain, artificial intelligence, or cloud infrastructure isn't enough -organizations must also invest in their people, training them to use these new technology solutions. It's this combination of implementing new technology and training workers that will not only enable them to work but also protect them in the long run. Every year, Wipro puts millions of dollars toward training and reskilling our employees. As an organization, we recognize that investing in our workers not only helps us navigate talent deficits when they occur but also protects our employees by giving them better job security. Ultimately, combining human ingenuity with the power of automation and technology allows us to scale our services and stay competitive even amid a crisis. In addition to these points, my peers and I discussed even more topics related to international manufacturing, COVID-19, and the new normal that we're all navigating during this crucial point in history. Plus, during the second half of the broadcast, business association leaders from key manufacturing sectors join to discuss their experiences amid the pandemic. To hear these insights, you can watch the entire "Making It Happen" episode of GBA's Jumpstart American Jobs Series. Simply follow this link, fill out the form and watch the panel discussion now. Milan Rao President - Marketing, Innovation & Technology, and Global Head - Manufacturing & Communications Business. Milan Rao is currently President at Wipro. He heads Wipro's core transformation office -MIT, or Marketing, Innovation and Technology - that is driving Wipro's business transformation and has the charter to develop transformative technology solutions. Milan oversees the CTO Office which is Wipro's innovation and R&D hub, and defines the company's technology vision and strategy, as well as incubates next-generation technology and service offerings. Milan provides direction to Topcoder, as well as to the global Marketing function. Milan also heads up two of Wipro's businesses globally -Manufacturing and Telecommunications, driving digital transformation across the value chain for Process & Industrial Manufacturing businesses. Automotive, Aerospace and Defense. Milan is part of Wipro's Corporate

#### Gopi Krishnan

----- Arcticle source ----- https://www.wipro.com/blogs/gopi-krishnan/ -----Author's Posts Contact Wipro Please fill the required details to access the content Gopi Krishnan Vice President - Domain & Consulting, Consumer BU, Wipro Limited Gopi is the global head of Industry Domain & Consulting Services group for Wipro's Consumer Business Unit which serves clients in a range of consumer-focused industries including Retail, CPG, New Age, Media & Entertainment, Travel, Transportation & Hospitality and Public Sector. Gopi is responsible for delivering better business outcomes and measurable impact for clients through Industry/Domain competency and Business Consulting offerings. He is part of the Consumer BU leadership team and also heads the BU pre-sales & solution definition organization. Gopi has over two decades of industry experience as a practitioner and leader across various functions of Supply Chain, Retail and Logistics around implementation, program management and practice leadership. His industry exposure ranges from retail & distribution to semiconductor and consumer electronics to logistics & container terminals. He has spent several years in diverse geographies including US, Japan, Philippines and Malaysia on projects apart from managing global practices around various supply chain functions including planning, execution procurement and asset management. Apart from enabling change with customers, Gopi is devoted to the cause of content-driven differentiation and influence-based leadership in the corporate workplace. He is an acknowledged thought leader with over two dozen publications to his credit, with retail, omnichannel/supply chain and business management being more frequent. Gopi holds a degree in Applied Electronics & Instrumentation Engineering from College of Engineering, Trivandrum (www.cet.ac.in) and an MBA in International Business/General Management from International Management Institute, 

#### Mike Morris

---- Arcticle source ---- https://www.wipro.com/blogs/mike-morris/ ---- Author Posts Contact Wipro Please fill the required details to access the content Mike Morris CEO of Topcoder, a Wipro Company Mike Morris is the CEO of Topcoder, a Wipro Company. As the CEO, Mike is responsible for the success of Topcoder and its customers and partners. Topcoder was a pioneer in the crowdsourcing model. Its 1Mn+ strong global community of design, development, and data science experts are redefining innovation today. Mike has been dedicated to Topcoder since its founding in 2002. He has also been instrumental in promoting how the world's top competitive technology community revolutionizes enterprise software. Previously the GM of Appirio, Mike led their customer innovation and sales/services teams to establish

Topcoder as the premier crowdsourcing destination. He was also responsible for Appirio's organically grown crowdsourcing platform, Cloudspokes. His vision helped build the offering from concept to a multi-million-dollar business in less than 2 years. Cloudspokes was merged with Topcoder after the acquisition and successful integration of Topcoder and Appirio. A Boston College alumnus, Mike began his career as a C++ engineer working on Protean – ERP focused on manufacturing companies. As the Director of Design and Development at Tallan Inc., Mike led strategic accounts covering the North West from Silicon Valley to Seattle. Mike's ability to manage and motivate at all levels of the internal/external organization, as well as serve as an accessible software industry resource, enables him to connect with technologists and strategists throughout the world.

### Crowdsourcing - A more secure means

#### of software development

----- Arcticle source ----- https://www.wipro.com/blogs/mike-morris/ crowdsourcing-a-more-secure-means-of-software-development/---- About the Author Contact Wipro Please fill the required details to access the content Crowdsourcing - A more secure means of software development September | 2018 People make mistakes. We're only human. But in business, human error can become a risk — whether nefarious or accidental. The fact of the matter is that the majority of security flaws come from people in the organization. In a traditional software development enterprise, people are vetted, badged, and trained on security best practices. You can expect a certain degree of error there. Topcoder, on the other hand, isn't traditional; we go on the offensive because we don't have badged employees. People don't swipe to get access. We don't host in-house security trainings. Instead, we treat every interaction as a secure one. We use the following security and confidentiality processes to make sure that nothing is left behind or left unchecked, and that our customers are always protected. Security and IP screening software Most software and data security breaches are the result of something unintentional. So above all else, we need to embrace technology to ensure we are not letting any code, design, or algorithm go unchecked. Starting with the simple fact that we always use secure channels to transfer any IP, this enables us to systematically monitor and track the lifecycle of our customers' digital assets. At Topcoder, we use a combination of best-of-breed static analysis code scanning and IP screening combined with in-house technology. We use artificial intelligence and advanced heuristics to certify the security, adherence to standards and best practices, and even authenticity of the code. When it comes to security, being on the offensive is a great defense. Process and code reviews Software alone isn't enough. We also put processes in place to make sure things go according to plan. Specifically, we atomize code, both to protect our customers' privacy and to remove single points of failure such that no one person is physically

able to connect independent pieces to do something nefarious. At Topcoder, it's our code reviews that determine who gets a paycheck at the end of the day. Everywhere else, the code check is done by a peer down the hall. It's done after the fact, and more as a review of the person than as a review of the code itself. Our code checks are serious; because they determine who gets paid, there's an inherent responsibility to get it right the first time around. We use the best and most accomplished members of our community to perform anonymous code reviews. Not only is it much more accurate and efficient than having dedicated internal staff or customers perform the reviews, but it also ends up producing higher-quality outcomes; the redundancy in the number of reviewers ensures the veracity and quality of the reviews themselves. In this sense, we even use crowdsourcing to generate more accurate code reviews. Contracts, rules, and regulations What security measure has been around the longest? Contracts. Of all the things, a business can do to protect their customers, a signed contract should be lowest on the totem pole. And for us, it is. The signed piece of paper that traditional companies use as their standard is our weakest link. Contracts only provide a single layer of security. They're good to have (and still necessary), but in the digital age, they're no longer enough. If you're going to the contract to resolve an issue, it's already too late. When Topcoder Community members submit to a challenge, there are extensive rules and regulations in place — red tape that further qualifies competitors and their submissions. Our rules and regulations are also far more specific than that of a traditional company because we apply them, reference them, and enforce them on every interaction that shares or produces IP. Most companies apply and enforce them twice: at the time of hire and at the time of exit. All of that being said, businesses don't need to sacrifice innovation for security. Through secure software channels, IP screening tools, peer reviews, rules and regulations, contracts, and code scans, Topcoder delivers the safest possible experience for our customers, while also providing the most innovative method of technology delivery. Mike Morris is the CEO of Topcoder, a Wipro Company. As the CEO, Mike is responsible for the success of Topcoder and its customers and partners. Topcoder was a pioneer in the crowdsourcing model. Its 1Mn+ strong global community of design, development, and data science experts are redefining innovation today. Mike has been dedicated to Topcoder since its founding in 2002. He has also been instrumental in promoting how the world's top competitive technology community revolutionizes enterprise software. Previously the GM of Appirio, Mike led their customer innovation and sales/services teams to establish Topcoder as the premier crowdsourcing destination. He was also responsible for Appirio's organically grown crowdsourcing platform, Cloudspokes. His vision helped build the offering from concept to a multi-million-dollar business in less than 2 years. Cloudspokes was merged with Topcoder after the acquisition and successful integration of Topcoder and Appirio. A Boston College alumnus, Mike began his career as a C++ engineer working on Protean - ERP focused on manufacturing companies. As the Director of Design and Development at Tallan Inc., Mike led strategic accounts covering the North West from Silicon Valley to Seattle. Mike's ability to manage and motivate at all levels of the internal/external organization, as well as serve as an accessible software industry resource, enables him to connect with technologists and strategists throughout the world.

www.wipro.com/blogs/shivanand-hiremath/ ---- Contact Wipro Blogs By Author Four best practices that enable in digitalizing tenant acquisition management to navigate the changing real estate landscape Contextualized and Personalized Service Engineering with Wipro's Cognitive Customer Service solution and SAP S/4HANA Wipro's PPE Surveillance and Compliance: Enabling automatic vigilance of PPE usage in the COVID-19 era Please fill the required details to access the content Shivanand Hiremath Shivanand Hiremath Consulting Partner and Senior Digital Solutions Architect, Wipro Shivanand has over 22 years of global experience. He leads the Digital Innovation Solutions group within Wipro's SAP Practice focusing on energy, utilities, and real estate. One of his key activities includes "Incubation to GTM" for smart business applications addressing business challenges working with SAP, customers, and technology partners who are integrating with best-of-breed technologies. He is also the product owner for Preconfigured Solutions and Model Company Solution Development. The real estate industry is facing changing headwinds - from tightening leasing regulations and new compliance standards to global market uncertainties and changing customer preferences. Industries that are highly dependent on customer service like Utilities, Telecom, and Insurance are investing significantly in customer experience (CX) transformation. During the ongoing COVID-19 pandemic, we are likely to see the use of Personal Protective Equipment (PPE) being recommended - in hospitals, malls, offices and other places where people congregate.

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# Four best practices that enable in digitalizing tenant acquisition management to navigate the changing real estate landscape

----- Arcticle source ----- https://www.wipro.com/blogs/shivanand-hiremath/ four-best-practices-that-enable-in-digitalizing-tenant-acquisitionmanagement-to-navigate-the-changing-real-estate-landscape/ ---- About the Author Contact Wipro Please fill the required details to access the content Four best practices that enable in digitalizing tenant acquisition management to navigate the changing real estate landscape October | 2020 The real estate industry is facing changing headwinds - from tightening leasing regulations and new compliance standards to global market uncertainties and changing customer preferences. As in other industries such as retail and ecommerce, the emergence of the on-demand economy is reshaping tenant expectations in real estate. However, even as most industry respondents in a recent Deloitte survey[i] rated tenant experience as a top priority, real estate executives are constrained by disjointed sales, property data and leasing functions. The inability to get real time consolidated view of the sales pipeline information and take necessary action leaves executives unequipped to streamline their Tenant Acquisition Management (TAM) process, which in turn hampers lead conversion. How

can real estate companies and leasing agents establish a lean lead to lease cycle and prevent it from becoming a repetitive drain on their business? Four best practices to delivering a superior tenant experience Improving lead to lease conversions has two-fold benefits - it improves real estate firms' bottom lines while driving a superior tenant experience. Here are four ways to get it right with a digital TAM solution: 1. Respond to queries with agility: Quick response time makes a big difference to the lease to lead conversion rate. Millennials especially, are driven by speed in everything they do and being the largest generation in the workforce today, are redefining business models across industries with their spending power. Property managers who respond to inquiries within 1-2 minutes vs. 24 hours later are actually 40% more likely to connect with prospective leads. What's more - 20% of prospective renters will move on to another listing if they don't get a response within 30 minutes.[ii] An intelligent Tenant Acquisition Management (TAM) platform can help leading agents get real time visibility into their leads and opportunities pipeline and even screen and schedule rental showings for all prospective tenants, significantly reducing leakage of inquiries. 2. Identify right fit properties: Leveraging the right Tenant Acquisition Management (TAM) platform, leasing agents should be able to quickly search properties based on availability, location, price, and size, compare different properties and even block properties. TAM platforms display property details such as pictures, amenities, neighborhood information, maps, and customer and contract history. The result: leading agents are able to best match their clients' criteria to properties, accelerating the conversion process and delivering a superior tenant 3. Qualify leads effectively: Leveraging the right TAM solution, leasing agents can do a tenant screening process to qualify tenants and focus their efforts on serious leads. By analyzing tenant insights derived from the platform, agents can determine what prospective tenants are looking for and include that information in the listing to drive relevant targeting and better conversions. 4. Manage all transactions under a single umbrella: Besides streamlining day to day activity planning and tracking, the right TAM solution should offer leasing agents a ready reference to historical interactions and agreement. Managing all transactions through such a centralized consolidated platform significantly improves and accelerates contract management by giving real estate executives all the information they need - quickly and accurately. Manage the lead to lease cycle with Wipro's Tenant Acquisition Management (TAM) solution Wipro's TAM, an SAP industry cloud solution provides real estate firms comprehensive capabilities to manage the lead to lease cycle with an app that provides a 360-degree view of your properties. The app connects with your backend SAP S/4HANA REFX solution and also guickly integrates with your front-office CRM solutions to drive seamless integration between sales and leasing functions. The result: A smarter workflow that enables your leasing agents to connect with customers, search and short list properties, manage tenant interactions, and create lease agreements - cost-effectively and guickly. Our TAM solution has delivered up to 25% time saving for leasing agents and 15% savings in the cost of lease cycles for clients. It enables a lean lead to lease cycle with better and faster conversion rates in tenant lease deal closure. [i] Deloitte, 2020 Commercial Real Estate Outlook, https://www2.deloitte.com/us/en/insights/industry/financialservices/commercial-real-estate-outlook.html [ii] Zillow, Response

Matters: Best Practices to Maximize Your Lead Conversion, https:// www.zillow.com/multifamily-knowledge-center/rental-marketing/bestpractices-lead-conversion/ Shivanand Hiremath is a Consulting Partner and Senior Digital Solutions Architect with over 22 years of global experience. He leads the Digital Innovation Solution group within Wipro's SAP Practice, with special focus on Energy, Natural Resources, Utilities, Real Estate, and Healthcare. One of his key activities includes "Incubation to GTM" for smart business applications to address business challenges, working with SAP. customers and technology partners, integrating with best-of-breed technologies. He is also the product owner for preconfigured solutions and model company solution development for real estate and utilities respectively, working closely with SAP. Shivanand can be reached at shivanand.hiremath1@wipro.com. Satish Chandra Bhaskara Practice Head, SAP Solutions, Wipro Satish Bhaskara leads the SAP C/4HANA competency at Wipro Limited. He has 20 years of experience in various SAP modules. Customer Experience Management on Qualtrics and C/4HANA Integration are his focus areas. He is an expert in the areas of SAP CRM / SAP C/4HANA and has implemented multiple transformation programs.

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## Wipro's PPE Surveillance and Compliance: Enabling automatic vigilance of PPE usage in the COVID-19 era

----- Arcticle source ----- https://www.wipro.com/blogs/shivanand-hiremath/ wipros-ppe-surveillance-and-compliance-enabling-automatic-vigilance-ofppe-usage-in-the-covid-19-era/ ---- About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Wipro's PPE Surveillance and Compliance: Enabling automatic vigilance of PPE usage in the COVID-19 era May | 2020 During the ongoing COVID-19 pandemic, we are likely to see the use of Personal Protective Equipment (PPE) being recommended - in hospitals, malls, offices and other places where people congregate. The level of PPE usage might differ for various user groups - for instance, healthcare workers (doctors or nurses) who work in hospital OPDs require N95 masks, goggles, water-resistant gowns and hand gloves. In contrast, those who work in administrative departments of hospitals are less at risk and a simple mask and gloves may offer sufficient protection. Nevertheless, as countries and economies prepare to slowly emerge out of their COVID-19 induced lockdowns, the usage of basic PPE will continue to be a critical factor in ensuring citizens' as well as employees' safety and containment of spread of infection. Shopping malls,

offices, multiplexes, hospitals and other public places will need to have mechanisms in place to rapidly detect and monitor non-compliance of PPE and take immediate mitigation steps. Does this mean companies should deploy more vigilance/support staff to monitor their employees? How would they manage the additional cost burden, given that they are already under severe pressure due to COVID-19 induced losses to business? Designed to ensure automatic vigilance of PPE usage, Wipro's PPE Surveillance & Compliance solution, powered by SAP leverages Machine Learning (ML) models to identify non-compliance cases, SAP HANA modelling to comprehensive alert management and mitigation policies. Its tight integration with SAP S/4HANA/ ECC leverages existing alert response process implementation like work order to implement follow-up actions per existing standard operating procedures. How does it work? Imagine a shopping mall where Wipro PPE Surveillance & Compliance is deployed at the entrance checking and integrated with existing surveillance systems. Trained ML models scan video/image feeds to detect any non-conforming cases i.e. people not wearing masks or other recommended PPE. On detection, an automatic alert notification is generated that provides the location and other details. The alerts are automatically routed to the concerned staff (security guard, supervisor, etc.) based on business rules for each persona. Interactive dashboard and cockpit on SAP UI5, helps the staff manage and mitigate alerts with preconfigured Next Best Actions (NBA). Track, trace, mitigate - the way to safety from COVID-19 Enabling real-time identification of non-compliant cases, quick tracing, and faster risk mitigation through well-defined steps, and most importantly - Wipro's PPE Surveillance & Compliance solution does all this without putting a significant cost burden on organizations as the solution complements and integrates with existing CCTV/Image providing systems. It empowers frontline staff (security guards) as well as the management (facility managers, operations supervisors, etc.) to get a consolidated view of all CCTVs with escalated alerts. They can analyze alerts, issue and monitor work orders where required, maintain appropriate documentation, and streamline the overall process flow. Wipro's PPE Surveillance & Compliance solution provides these key benefits - a) Controls the spread of infection b) Reduces disruption of operations due to rapid detection and mitigation c) Provides a user-friendly surveillance device at fingertips d) Fool-proof auditability due to system-based automation of end-to-end alert management process e) Lowers reliance on PPE for health staff; especially important given the current shortage of supply. As the human race continues to fight the COVID-19 pandemic, effective vigilance will play a key role in securing our win. Savvy organizations are turning to solutions like Wipro's PPE Surveillance & Compliance to emphasize on safety while keeping costs under control. Industry: Shivanand Hiremath Consulting Partner and Senior Digital Solutions Architect Wipro Shivanand 22 years of global experience. He leads the Digital Innovation Solution group within Wipro's SAP Practice, with special focus on Energy, Natural Resources, Utilities, Real Estate and Healthcare. One of his key activities includes "Incubation to GTM" for Smart business applications to address Business Challenges, working with SAP, Customers and Technology Partners, integrating with best-of-breed technologies. He is also the product owner for Preconfigured Solutions and Model Company Solution Development for Real Estate and Utilities respectively, working closely with SAP. Shivanand can be

reached at shivanand.hiremath1@wipro.com. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

## Contextualized and Personalized Service Engineering with Wipro's Cognitive Customer Service solution and SAP S/4HANA

----- Arcticle source ----- https://www.wipro.com/blogs/shivanand-hiremath/ contextualized-and-personalized-service-engineering/ ----- About the Author(s) Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Contextualized and Personalized Service Engineering with Wipro's Cognitive Customer Service solution and SAP S/4HANA August 2020 Industries that are highly dependent on customer service like Utilities, Telecom, and Insurance are investing significantly in customer experience (CX) transformation. They are adopting digital best practices to be competitive and explore cost-effective ways to meet the demands of their customers. For example, a Gartner study shows that over 50% of Utility companies are reallocating their investments on CX innovations. Utilities are still behind the curve when it comes to adoption of CX transformation, as compared to other industries like Retail. However, with increased deregulation, competition, and regulatory mandates; customers are seeking innovation-led customer-service models. The key ingredients of a successful customer-service model are enhanced end-user experience with personalized elements that can deliver a superior customer experience. Let's elaborate further: Need for Experience Engineering - While "Anytime Anywhere" (ATAW) solutions enhance end-user experience, deploying welltrained employees (customer-service agents) and providing "First Contact Resolution" (FCR) consistently have improved customer service. However, organizations still struggle to maintain consistency and contextualize service experience due to high attrition of Customer Service Agents (CSAs) and a lack of personalization, respectively. This in turn leads to increased training cost and overall cost to serve. Any shortcoming in training results in inconsistent customer experience delivered to the customer. Customers are seeking consistent experiences across all channels of their interaction, triggering a need system based foundation to drive improved customer

experience. Personalize, Predict, and Act - Customers expect their service providers to personalize the interactions and propositions offered to them. Over 81% of consumers want their Utilities to know them better and interact accordingly. However, over 60% of companies grapple with providing personalized experiences in real time. Without compromising on customer privacy, leveraging customer data such as past interactions, account history, social media interactions, usage patterns, payment patterns etc. to derive valuable customer insights enable improved customer centricity. Previse Customer Needs - The insights derived from customer data to predict customer needs, and providing required contextual data at the point of interaction, help CSA to provide personalized experiences with reduced effort. To enable this, SAP Intelligent Technologies like Machine Learning and Artificial Intelligence enable organizations to develop various algorithms and package it as a model. Moreover, automation bots can be developed and integrated to complete system updates for mutually agreed actions between customer-service agents and their customers. Integrating such capabilities across customer-interaction channels enables a unified customer-service experience, employee experience, better consistency, and in turn leads to customer loyalty. Wipro's Cognitive Customer Service Wipro's Smart Customer Service Solution is a configurable suite of integrated applications to predict the customer's needs (like the purpose of customer interaction), provide Next Best Actions (NBA), and automate resolutions that are mutually agreed with the customer. The solution delivers a configurable framework to incorporate each service organization's Customer experience. The Solution is implemented on SAP Cloud Platform, leveraging SAP Intelligent Technologies like Machine Learning, Business Rules Engine, Intelligent Robotic Process Automation (iRPA) and integrated with SAP S/4HANA Customer Management and IS-Utilities. Various KPIs can be measured leveraging analytics reports, such as measurement of success of Prediction and Automation Usage Analytics. It is already anchored in the Utilities industry; however, the framework-based architecture helps in faster adoption and deployment of the solution for any industry. Plug-in Past Data to Predict The Solution can be seamlessly integrated and embedded within the current Customer Interaction Centre functionality, thus complementing --and not competing/replacing-- the existing process. Addressing the dynamic nature of customer interactions, the model comes with continuous learning from each customer interaction, thereby making the model more effective, contextual, and reliable. The customer-service operating model is set to move from an employee-based model and adopt the Uberization model. Such transformations are technology led/driven and solutions like Cognitive Customer Service will expedite setting up such an ecosystem. Ultimately, it leads to increased CSAT, reduced Cost-to-serve, and most importantly, Customer Retention and Employee work satisfaction. Industry: Shivanand Hiremath Consulting Partner Consulting Partner with over 22 years of experience, and close to 18 years in the Energy and Utilities domain, implementing transformation programs globally. He currently leads Digital Innovations initiatives in the Energy, Natural Resources, and Utilities domain, co-innovating with customers, Partners and SAP, leveraging S/4 HANA, SAP Cloud Platform, SAP Intelligent Technologies and open-source technology. His key activities also include Smart business application usecases identification, emerging technology assessment and fitment, coinnovation, product maturity assessment, and Rapid Deployment Solutions.

Shivanand can be reached at shivanand.hiremath1@wipro.com. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

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#### Dr. Vijay Kumar K

## Part 3 of Deep Learning - Building the Next Generation of Edge Devices: What Are the Architectural Aspects of Edge Devices Needed for Deep Learning?

---- Arcticle source ---- https://www.wipro.com/blogs/vijay-kumar/part-3deep-learning-building-the-next-generation-of-edge-devices-what-are-thearchitectural-aspects-of-edge-devices-needed-for-deep-learning/ ----- About the Author Contact Wipro Related Blogs Connectivity and Interoperability: Realizing the Full Potential of Comprehensive IoT Solutions Strategic Partnerships Will Drive 5G Success for Communications Service Providers Using IoT to Create an Intelligent Enterprise Please fill the required details to access the content Part 3 of Deep Learning - Building the Next Generation of Edge Devices September | 2019 Having covered aspects of why and how to bring deep learning (DL) inference into edge devices in Part 1 and the top-seven industries building the next generation of edge devices in Part 2, we now look at architectural aspects of edge devices with DL inference in the third part of this blog series. Offline training of DL systems is likely to continue to find a home in the cloud, which tends to be built with large numbers of Central Processing Units (CPUs), Graphics Processing Units (GPUs) and/or Field Programmable Gate Arrays (FPGAs), along with specialized artificial intelligence (AI) chipsets. However, as we have already discussed, DL inference makes more sense at the edge. It is predicted that

by 2025, the market potential for cloud- and edge-based AI chipsets will reach \$14.6 and \$51.6 billion [1] respectively. Unlike cloud-based AI chipsets, edge-based AI chipsets must meet many more stringent constraints, including: In order to realize edge-based DL inference, some necessary requirements for Deep Neural Network (DNN) models include: The DL inference in edge devices can be realized with architectural choices including CPUs, GPUs, FPGAs and custom system on chips (SoCs). However, there is no single choice for all the possible application scenarios and areas, so it is worthwhile to consider the trade-offs between different architectural choices. The CPU-based inference is quite possible whenever the computational requirements are not so high (typically up to few hundreds of millions of floating point operations per second, MFLOPS). Here, CPU referred to is a general-purpose and off-the-shelf application processor chip. Moreover, if computational requirements are very high (typically up to few tens of trillions of floating-point operations per second, TFLOPS), CPU can optionally offload compute-intense operations to an additional GPU. Here, the GPU referred to is a general-purpose and off-the-shelf graphics chip. CPU-based DL inference solutions using off-the-shelf application processor chips can be attractive, particularly in cases where it allows users to reuse already purchased hardware for these newer inference workloads. Though CPU-based inference solutions are attractive for relatively low-performance applications, the power consumption is higher and such solutions won't scale up in performance due to fixed configuration of such application processor chips. In FPGA or custom SoC solutions, CPU offloads predetermined tasks to hardware inference engine built in them. Though very high-performance levels can be achieved (up to few tens of TFOPS), GPU-based solutions are normally not preferred for DL inference in edge devices due to very high power consumption and high cost. Furthermore, GPU-based solutions do not typically benefit from low-precision inference due to their architectures, which are inherently tuned for handling FP16/32 precision. However, in some safety critical applications such as autonomous cars, GPU power consumption and cost is justified due to higher performance demands. Similar to GPU, FPGA-based solutions are not normally preferred for DL inference workloads on edge devices, due to high power consumption and very high cost. Compared to GPUs, FPGAs run at lower clock speeds and many have not yet reached performance levels as that of state-of-the-art GPUs. Moreover, FPGA-based solutions do benefit from low-precision inference and are able to achieve low latency. FPGA based solutions may be considered when production volumes are very low or for prototyping purposes. Custom SoC-based solutions are attractive for inference at the edge for several reasons. The SoC-based solutions achieves the best trade-off between power, performance, and die-size. The SoCs can run at much higher clock speeds (relative to FPGAs) and achieves 5-10x performance improvement. Since SoCs are custom-designed for inference applications, their power consumption and die-size are lower compared to that of FPGAs. In addition, from a cost point of view, SoC-based solutions will be the lowest cost when production volumes are high. Hence, SoC-based DL inference solutions are best suited for applications including energy, utilities, industrial and surveillance etc., as discussed in Part 2 of the blog (which need few hundreds of MFLOPS to few BFLOPS), including battery operated solutions. Overall, custom SoC-based DL inference solutions are the most preferable in terms of die-size, power consumption, and cost.

Custom SoC-based inference solutions typically include one or more 64-bit CPU cores, a hardware DL inference engine, and peripheral interfaces for connecting various sensors, microphones, speakers, cameras, and displays. It should be noted that there is no single inference hardware engine that can cater to all application areas. An inference engine must be scaled considering the characteristics of the application area. The FPGA-based solutions are completely reconfigurable from a hardware point-of-view, which can be changed in the field. Even though custom SoC-based solutions are not fully hardware configurable (with FPGA based solutions), it should not be a concern. Care must be exercised in designing DL hardware accelerator engine that shall adopt a generic layer approach and software configurability, so that there are no limitations of mapping DNN models to custom SoCs. The inference hardware acceleration engine shall include different layers including pre-processing, convolution, activation, pooling, softmax, fully connected and post-processing etc., to which a DNN model can be mapped. Any DNN model is made up of several convolutions, activation and pooling layers, apart from others. Based on the complexity of application use case, the total number of layers in DNN model can vary from a few dozen to a few hundred. Also, DL inference hardware acceleration engines shall have support for CNN (Convolutional Neural Network) and RNN (Recurrent Neural Network) etc., for catering to imaging, audio, nonimaging applications, and the fusion of them. The inference hardware accelerator must fulfill certain constraints, including: Indicative design attributes of DL-inference hardware-accelerator in 16 nanometer and lowerprocess geometry nodes, for catering to various application areas include: A CPU- and hardware-accelerated-based DL inference custom SoC solution is best suited for most edge device applications. Further, if needed, GPU cores can be deployed in very high performance and safety critical edge device SoC solutions, such as autonomous cars. The critical success factors of inference in edge device includes: To reap the benefits from DL inference SoCs, investment goes beyond building just chipsets. A very efficient and intelligent software layer that runs on top of these chipsets is essential. Without this these inference SoCs are not usable. In the near future we will see inference start to drift from cloud to edge devices, and considering the above architectural aspects and trade-offs, vertically-integrated inference solutions will dictate their future success. References (1) https:// www.tractica.com Industry: Dr. Vijay Kumar K Chief Architect and Distinguished Member of Technical Staff - VLSI Technology Practice Group of Product Engineering Services, Wipro Vijay has been with Wipro for about 19 years and has been in the VLSI industry for more than 24 years. He has done architecture and design of several complex cutting-edge SoCs, ASICs, FPGAs and Systems, in various application areas, for top-notch semiconductor companies globally. He also specializes in the video domain and has created several solutions around video compression, postprocessing, etc. He has been granted 14 US Patents so far. He is currently working on next-generation architectures of semiconductor devices including edge devices with machine learning. To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. CSPs are looking to the enterprise (business-tobusiness) segment to help monetize their investments in 5G. As management guru Peter Drucker once said, "What gets measured, gets managed."

### **Pradeep Nair**

## Building smart cities on SAP platforms

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energy distribution system stretching hundreds of kilometres, with over thousands of sensors, aggregating multiple data points per hour. Delivering urban energy efficiency Urbanization is on the rise. Growing development in infrastructure and communications have deeply confounded cities with exponentially growing demand for energy and rising energy costs. A sustainable solution to address energy problems is a smart electric grid that allows real-time communication among network users and network components. Smart electricity grid deployment integrated with urban planning means better energy efficiency, cost optimization, and better availability for corporates and consumers. The grids stabilize electricity demand by matching instantaneous power generation and storage capacities available on the grid, smoothening demand peaks. Smart electricity grids have a great potential to improve urban energy efficiency. Elevating citizens' quality of life Improvement in liveability and economic prosperity is a natural consequence in a digital smart city. Delivering sustainable transformational citizen experience and infrastructure efficiency are key to Smart governance. SAP Platform for Smart Cities, enables collaboration between city assets, environmental metrics, city departments and citizens. The platform makes it possible for city administration to provide transparent and flexible citizen services leveraging connected city infrastructure. Smart buildings, Smart airport, Smart traffic management system, Smart garbage disposal systems are few other use cases that can be applied to city operations. Endnote 1 https://news.sap.com/2017/11/how-iot-is-turning-thisfrench-resort-town-into-a-smart-city/ Industry: Pradeep Nair Head - SAP Go-To-Market Group, Wipro Pradeep has over 19 years of experience across Enterprise Resource Computing, Cloud Computing and Enterprise Business Transformation. He can be reached at pradeep.nair1@wipro.com. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

#### Varun Kaushal

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## A Financial Framework for Effective

## Trade Promotion: The Big Picture

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medium to large size, there are many granular issues to be addressed regarding existing processes, organizational structure, your legacy technology environment and so forth. Before wading into the weeds of implementation, though, you need to step back and define the overarching objective. Here is a succinct big-picture formulation: The key objective should be to integrate financial planning with trade promotion decisions around a unified picture of demand. The basic idea here is that financial information needs to be an integral part of the operational decision-making that goes on at the level of promotions, assortment mix and other key marketing levers. It's not enough, in other words, to simply articulate a financial plan, set a budget, define rates and agree on a metric (such as ROI) to track progress. You need the right tools - processes and technology platforms & applications alike - to facilitate this integration. Where You Are, Where You Want to Be Having defined the overall strategic goal, the next step is to figure out where your current capabilities are in relation to industry best practices. This kind of gap analysis will help you make a practical, realistic assessment about what needs to be done in order to successfully integrate financial planning with trade planning. An example of this is taking stock of your key performance indicators (KPIs). Return on investment (ROI) is widely used as a benchmark for trade spend effectiveness. However, other KPIs can augment the picture given by ROI. Sometimes ROI does not factor retail execution data. How many displays were placed in store vs. JBP agreement? Did all the stores have POS displayed at the entrance? Other considerations involve the current technology environment and its adaptability to new processes outside current functions. How easy is it to incorporate business intelligence inputs from the field, and to update those as demand patterns evolve? Are demandfacing and supply-facing applications able to communicate with each other in support of a unified view? These issues are just the tip of the iceberg. The economics of trade spend should make them a top priority. When that Harvard Business Review article came out in 1990, there was no social media, no online shopping channels, no mobile marketing. The world for FMCG competitors today is far more complex than it was years ago. The need for effective integration of trade promotion with financial planning is all the more urgent. Are you ready to embrace this change? Promax TPO has predictive planning capability - based on machine learning concepts, it provides users the ability to quickly and efficiently conduct 'what - if' analysis to model different promotion scenarios, and review systematically generated business outcomes to determine the best combination of promotional inputs. Our Data Science service enables a powerful planning and analysis ecosystem that can be tailored to the needs of each business stakeholder. Our services teams are led by experienced domain experts to help you create predictive models to give your business that competitive advantage through best practices in trade promotion optimization. For more information, visit our website http://promax.wipro.com For gueries, write to us at WPAS-Promax@wipro.com Industry : Varun Kaushal Business solution Consultant, Wipro UK is a Business Solutions Consultant for Wipro Promax business unit focused on Trade Promotion Management and Optimization for the Consumer Goods Industry. He has 13+ years of experience in the retail industry across sales, e-commerce, business consulting, supply chain and project management. Varun is also proficient in TPM analytics and has a very good understanding of key KPIs in CG business. He holds a Bachelor's

degree in computer science from India and a Master's degree in Business Administration from Coventry University, UK. The consumer packaged goods (CPG) industry was badly affected by the pandemic, much like several other industries. Organizations in this industry therefore relied on retail In 2020, the pandemic rattled global supply chains As the retail sector continues to adapt and evolve to a post-pandemic environment

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## Brexit is Unpredictable - Your Trade

### Spend Doesn't Have to Be

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every customer and every SKU sold to that customer. That set of data is the key to making informed decisions around promotion activities, integrating those decisions with other marketing levers such as assortment mix & category management, and anticipating alternative outcomes through whatif scenario planning. Modeling for the Unknown That last point anticipating alternative outcomes through what-if scenario planning becomes a critical component of your trade promotion management in a world of Brexit-like surprises. What if the national currency in your major selling market plunges, like the British pound did after the Brexit vote? What if that triggers a much higher than anticipated inflationary trend? What if unemployment rises and demand for discretionary spending by your target consumer demographic falls? Scenario planning enables teams of promotion and other marketing decision-makers to understand the real, monetary implications of these what-if situations. Trade Promotion Optimization (TPO) software with scenario planning capabilities gives managers the ability to evaluate alternative probabilistic outcomes - for example, 25 percent best-case, 50 percent default-case, 25 percent worst case - and see the variation in revenue, profit margin, profit dollars and other key financial metrics. Machine Learning Vs. Black Box Approach Marketing managers know how quickly data can become stale and outdated. Consumer demand is constantly evolving - and at an even faster clip in a world where social media, online reviews, and third-party incentives can change tastes and preferences in real time. Historical data patterns can lose predictive value unless there are ways for the system to "learn" and process new information in real time. Recent software platforms have evolved to enable this kind of learning. For example, a salesperson in the field may become aware of circumstances around a planned sale that call into question prior assumptions. It may be something as simple (vet unexpected) as a freak weather event with the likelihood of disrupting near-term demand patterns. Or it may a sudden Brexit-like surprise with similar disruptive potential. The salesperson has the ability to input this observation via Data Scientist into the system - effectively "telling" the predictive models that a new, previously unaccounted-for variable is the reason why the outcome for this sale may measurably vary from established patterns. The models learn, and the data become available for even more nuanced "what-if" scenarios going forward. It would be nice to live in a world where you didn't have to reckon with the impact of major external surprises on any given day. In the absence of that, though, good data and informative models give you the power of understanding - and measuring - their potential impact. Promax TPO has predictive planning capability - based on the machine learning concept, it provides users the ability to quickly and efficiently conduct 'what - if' analysis to model different promotion scenarios, and review systematically generated business outcomes to determine the best combination of promotional inputs. It enables a powerful planning and analysis ecosystem that can be tailored to the needs of each business stakeholder. Our data science and professional services teams are led by experienced domain experts to help you create predictive models to give your business a competitive advantage through best practices in trade promotion optimization. For more information, visit our website http:// promax.wipro.com For queries, write to us at WPAS-Promax@wipro.com Industry: The consumer packaged goods (CPG) industry was badly affected by the pandemic, much like several other industries. Organizations in this

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industry therefore relied on retail In 2020, the pandemic rattled global
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Blogs By Author Please fill the required details to access the content Rohit
Adlakha Chief Digital & Information Officer and Global Head, Wipro
HOLMES<sup>™</sup> Rohit is at the helm of Wipro's digital transformation journey
where his core focus lies in creating end-user delight, strengthening digital
security and trust, monetizing IPs, and building a culture that fosters
innovation. As a technology leader, Rohit provides direction in aligning
technology with business strategies, re-imagining customer success,
weaving data and information into power, and leveraging technology to
create value for business. Rohit is a Wipro veteran, having spent 25 years in
several key roles across the world in sales, delivery, and P&L management.
In the last two decades, he has incubated and scaled several businesses
from infancy and is now steering Wipro's digital transformation.
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goals-covid-19-is-just-a-detail/ ---- About the Author Contact Wipro Related
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Detail. June | 2020 These are the times that test the mettle of every business
leader. Some will use COVID-19 as an excuse for why they can't possibly hit
their 2020 goals, and trust me, I understand that instinct. But as a leader,
our job is to be what the Navy Seals call "all in, all the time." Yes, COVID-19
knocked all of our plans miles out of alignment. Yes, hitting our 2020 goals
got a lot harder. But, no, we won't let any of that stop us. This is a career-
defining crisis. The CIOs who hit their goals in spite of COVID-19 will earn
the gratitude of their CEO, inspire their teams to reach new heights, and
have amazing stories to tell their children and grandchildren. If those things
aren't worth fighting for, I don't know what is. Here's what happened when
COVID-19 hit Wipro. We started the new year with four bold goals: improve
the employee experience; ensure that CIO functions are completely aligned
with business value; improve security and trust; and build the pride of our
team. But of course, there's not a CIO on Earth whose goals accounted for
the worst pandemic in a century. In March, when the pandemic hit, it hit
hard. Fortunately, investments we'd been making for the past several years
cushioned the blow. The first of those investments was time we'd spent
building relationships within the company. From day one, every one of our
CXOs has worked with us side-by-side to regain our balance. We ran a very
tight ship, communicating every few hours to create a solid game plan -
what would work from home (WFH) mean to Wipro as a company? The
second key investment was in technology. Because we had key technologies
already in place, we were able to quickly get 93% of our
180,000+ employees to start working from home. We've been working for
years pushing for employees to have the best collaboration tools, and useful
automation at the fingertips of every employee. Decisions and
implementations were easier, because employees were empowered to do a
lot on their own. If we hadn't done all that in advance, we would've had a
much tougher time of it. Still, challenges were — and still are — everywhere.
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These drive our priorities. Threat vectors had been growing multifold even before the pandemic — ransomware, data breach, network intrusion, and more. Now, with people working from home, security threats are at an alltime high. We have taken a two-pronged approach of leveraging technology to ensure endpoint compliance, using MFA (Multi-Factor Authentication), VPN, VDI, and firewalls, etc., as well as inculcating a culture of assessing threats and safeguarding information amongst our employees via IEC (Information, Education and Communication) drives. We're thinking hard about new employees, too. As we onboard them it's more important than ever to help them feel comfortable and productive from their very first day. The long, continuing journey to re-opening means everything from equipment (more laptops, or more desktops?) to real estate and collaboration without being on-campus and beyond needs to be reconsidered. We're using the next 6-9 months as an opportunity to futureproof ourselves, because the hybrid workplace — sometimes in the office, sometimes remote — is unquestionably what's next. Lessons learned First, always invest in building strong teams, strong cross-functional relationships, and don't skimp on technology. When a crisis hits, you will need those more than ever. Second, when the entire company is stressed, they need a CIO who isn't. In a crisis you can work 24 hours a day, but don't. Take breaks, take deep breaths, take care of yourself. Aim for daily progress, not instant perfection. Third, plan for the future. Accept that remote working will be part of every company's workforce and plan accordingly. While some employees return to the office and some stay remote, you'll need to ensure that both groups can collaborate effectively. Video conferencing, cloud file sharing, instant chat, and other tools that have been invaluable during the past few months will need to be in place permanently. We're building on our digital transformation, increasing our productivity, and reimagining our workspaces to comply with safety and social distancing regulations. Our digital transformation work is infusing data and design thinking into every business decision. We're also using Wipro HOLMES™ and our Agile Anywhere methodology to make Wipro more productive by automating manual processes and uncovering insights and new ways of working so that we can accomplish client projects in much shorter timeframes. We're using AI to determine how to best lay out our new office, meeting, and cafeteria spaces for social distancing as well as developing new solutions to detect potential infection and keep employees. Lastly, focus on what's good. Our IT team has been pushed to the limit, and it has been inspiring to watch our people step up and grow stronger and wiser almost daily. Our entire Wipro team, spanning the entire company, has pulled together admirably. The technology capabilities we've been building for years have handled this torture test amazingly well. The goals we had in January are still worthy ones, and we fully intend to reach them. I'm confident you can, too. Industry: Rohit Adlakha Chief Digital & Information Officer and Global Head, Wipro HOLMES™ Rohit is at the helm of Wipro's digital transformation journey where his core focus lies in creating end-user delight, strengthening digital security and trust, monetizing IPs, and building a culture that fosters innovation. As a technology leader, Rohit provides direction in aligning technology with business strategies, reimagining customer success, weaving data and information into power, and leveraging technology to create value for business. Rohit is a Wipro veteran, having spent 25 years in several key roles across the world in sales, delivery, and P&L management. In the last two decades, he has incubated and scaled several businesses from infancy and is now steering Wipro's digital transformation. Financial Services is one of the most challenging industries from a technology standpoint. Digital business transformation is now critical to the survival of virtually every organization, but effective change management must center on people. Successfully implementing automation systems might never be "easy," but platforms and solutions have emerged to make it as frictionless as possible.

www.wipro.com/blogs/santosh-gundurao-gurlahosur/ ----- Contact Wipro Blogs By Author How has the COVID-19 pandemic impacted the upcoming Medicare Advantage Annual Enrollment Period? Simulate Medicare Annual Enrollment Period before it occurs Please fill the required details to access the content Santosh Gundurao Gurlahosur Santosh Gundurao Gurlahosur Consultant, Medicare With the expertise in Healthcare Information Technology, Santosh brings in a blend of domain, technology, delivery & program management experience. He has managed and grown large customers and is focused on building products, end-to-end customer management and nurturing robust & efficient teams to manage complex Healthcare & Medicare advantage products & services. Santosh is also AHIP certified. He can be reached at Santosh.gurlahosur@wipro.com. The COVID-19 pandemic... The Medicare Open Enrollment Period, sometimes called the Annual Election Period (AEP), runs each year from October 15 to 

### Simulate Medicare Annual Enrollment Period before it occurs

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even occur in production? Let's try to go through the answer in steps: I am not talking about using Sci-fi time machines to address this problem. There are time simulation solutions which can be used to mimic AEP scenarios before AEP begins. This will empower testing team to address above mentioned issues. For one of our M360 clients Wipro has deployed time simulation module which enabled the client to perform end-to-end testing way before AEP. This resulted into a successful AEP. Most of the health plans would start the AEP preparation in terms of completing the change requests, closing on all defects and consolidating any pending activities in the month of July. Generally, July's software release would be a major one. Post this release internal AEP testing activities and AEP preparation would kick-in. Health plans that have witnessed resource constraints, application error backlogs, error prone manual activities and increased member grievances during AEP must start evaluating an end-to-end pre-enrollment and membership management system. Sooner the better! Reference https:// www.cms.gov/outreach-and-education/reach-out/find-tools-to-help-you-helpothers/medicare-open-enrollment.html Got a question about M360? Contact us and we'll respond as soon as possible Industry: Santosh Gundurao Gurlahosur Consultant, Medicare With the expertise in Healthcare Information Technology, Santosh brings in a blend of domain, technology, delivery & program management experience. He has managed and grown large customers and is focused on building products, end-to-end customer management and nurturing robust & efficient teams to manage complex Healthcare & Medicare advantage products & services. Santosh is also AHIP certified This year's event was the largest gathering in the history of the Medicaid Enterprise System Conference (MESC) according to the New England State Consortium Organization (NESCO), the organizers of the event. Label and artwork management in medical device companies are still seen as an afterthought and therefore, there is not enough concentration as well as investment in this area. However, with new updates such as traceability (UDI) and e-labeling, companies are compelled to invest time and money to be compliant on the regulations required. The employee healthcare benefits reckoning is here. The enduring impact of COVID-19 has converged with digital transformation - especially the accelerated advancement of data collection and analytics - to create sweeping changes in employee-employer relations. The chaotic pace of change in managing remote workforces and retaining top talent has placed an enormous strain on employers. Meeting bottom lines while addressing significant increases in employee healthcare costs and premiums can become an existential 

## How has the COVID-19 pandemic impacted the upcoming Medicare Advantage Annual Enrollment Period?

----- Arcticle source ----- https://www.wipro.com/blogs/santosh-gunduraogurlahosur/how-has-the-covid-19-pandemic-impacted-the-upcomingmedicare-advantage-annual-enrollment-period/ ----- About the Author Contact Wipro Please fill the required details to access the content How has the COVID-19 pandemic impacted the upcoming Medicare Advantage Annual Enrollment Period? August | 2020 The upcoming Annual Enrollment Period [1] (AEP) is between October 15 and December 7, 2020 and will be completely different from all the previous AEPs put together. The COVID-19 pandemic has brought unprecedented changes that no man or machine could have predicted. There will be additional aspects in the AEP this time, unlike what would normally be included from the health plans. Under other circumstances, by now all tele-sales agents have been contacted and face-toface classroom training would have been started. Key information about new plans, services areas extensions, change in plan benefit packages (PBPs), and training on social determinants of the health (SDoH) & CMS (Centers for Medicare & Medicaid Services) compliance requirements would have been shared. In parallel, the operations teams would have been performing deep-dive sessions with various disparate systems of health plans and reviewing the learning from the previous year's AEP. These activities may still happen with this AEP, but they would be done virtually and remotely. While social distancing is critical in preventing COVID-19, this distancing is also posing critical challenges for health plans. Member engagement - As we know, since agents/brokers are not going to have kitchen table meetings with beneficiaries, most of the discussion would happen over the phone or video calls. Operations team - Health plans that have partially automated processes and depend on local processes and paper-based checks and balances will have challenges in performing end-to-end enrollment intake to CMS submission scenarios The convenience provided by the 'AEP command center' enabling team members to work closely will be missed Surge in inbound calls - Since seniors are not going to have kitchen table meeting with agents, they will call the health plans. Health plans need to have adequate tele sales agents to handle this surge. New CMS changes -Interoperability and Patient Access final rule (CMS-9115-F) Retaining existing customers through Social Determinant of Health (SDoH) The core of AEP preparedness will start from creating "AEP Command center", which monitors all the 4 components - People, Process, Technology & Infrastructure. An impact analysis of Covid-19 on each of these components would enable Health plans to be well prepared for the upcoming AEP. Wipro hosted a webinar and discussed these 4 core components as part of "Medicare AEP Growth and changes in the wake of COVID-19: How to overcome the Challenges!". [1] https://www.cms.gov/Outreach-and-

Education/Reach-Out/Find-tools-to-help-you-help-others/Medicare-Open-Enrollment Medicare Open Enrolment is also known as AEP. Every year, Medicare's open enrollment period is October 15 - December 7. Medicare health and drug plans can make changes each year—things like cost, coverage, and what providers and pharmacies are in their networks. October 15 to December 7 is when all people with Medicare can change their Medicare health plans and prescription drug coverage for the following year to better meet their needs Santosh Gundurao Gurlahosur Consultant, Medicare With the expertise in Healthcare Information Technology, Santosh brings in a blend of domain, technology, delivery & program management experience. He has managed and grown large customers and is focused on building products, end-to-end customer management and nurturing robust & efficient teams to manage complex Healthcare & Medicare advantage products & services. Santosh is also AHIP certified. He can be reached at Arcticle source ---- https://www.wipro.com/blogs/harshil-patel/ ---- Contact Wipro Blogs By Author Next-Gen AIOps - The power of unified view Please fill the required details to access the content Harshil Patel Harshil Patel Open Source Marketing, Wipro Harshil works on end-to-end marketing initiatives for Open source practice at Wipro. With a focus on creating differentiated brand positioning and gaining ecosystem mind-share, he leverages marketing levers such as integrated marketing campaigns, social media / digital marketing, thought leadership, influencer marketing and account based marketing to deliver business impact and growth. An IIM alum, he is fond of travelling, reading and movies. You can connect with him over LinkedIn to know more. How next-gen AIOPs platforms will integrate DevOps and Business intelligence to provide unified view of IT 

## Next-Gen AIOps - The power of unified view

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logs, metrics, etc. They will correlate these diverse sources of information, and through machine learning and AI, analyse the root cause. This will provide a common view across different entities and enable quick issue resolution or with the next-gen platforms - proactive issue prevention. AIOps platforms are also capable of understanding topology, detecting anomalies, determining root cause (of issues) and providing prescriptive advice. As such, they are capable of identifying issues and detect dependencies present in any IT infrastructure topology. These features make them apt for deploying with DevOps. With DevOps, when we are integrating any new code, we check the new topology to understand the impact of new code. By creating a simulator that simulates topology after integration of the developed code, we can run AIOps platform on it to detect anomalies in this new topology. This will essentially allow us to predict potential problems in deployment and will help detect potential security issues. Enterprises across industries are embracing a digital strategy leading to an increased focus on IT - Business alignment or IT - Business convergence (as many people are calling it now). A major concern that IT experts face in adhering to this convergence is the lack of a unified view across IT infrastructure and showing real-time insights of the impact of IT on businesses. However, with the rise of AIOps we have a way to provide this unified view and by coupling it with BI (Business Intelligence) applications, we can also gauge the impact of IT on business for better convergence. So, the next-gen AIOps platforms will have a broader scope - one which integrates DevOps and BI as well. They will be able to provide a unified view of the end-to-end IT infrastructure, from new code development to managing the existing IT infrastructure to the implications of this infrastructure on the businesses. This opens up multiple use cases for AIOps implementation. It will enable business managers to take better IT-related decisions and for IT managers to establish the importance of infrastructure more effectively. It will start being an important factor in the digital strategy for businesses and will pave the way for better decision making and improved IT - Business convergence. But, how do you leverage this power (of unified view) to improve decision making? What is the strategy to effectively integrate AIOps into the existing IT infrastructure? How do you utilize the next-gen AIOps platforms to achieve your business objectives? Watch this space for more information. Industry: Harshil Patel Open Source Marketing, Wipro Harshil works on end-to-end marketing initiatives for Open source practice at Wipro. With a focus on creating differentiated brand positioning and gaining ecosystem mind-share, he leverages marketing levers, such as integrated marketing campaigns, social media / digital marketing, thought leadership, influencer marketing and account based marketing to deliver business impact and growth. An IIM alum, he is fond of traveling, reading and movies. You can connect with him over LinkedIn to know more. To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. Salesforce offers an incredible range of functionalities, making it difficult to find.... A report from Forrester predicts up to 20% of Fortune 500 companies will not make it through 2021 intact. "[For] some, their assets will be dissolved or purchased; others will just go out of business." One possible cause of this is a lack of strategy when investing in and utilizing technology. "The pandemic revealed the flaws in many companies' technology...and their tech leaders were found mired in Band-Aids like tech modernization, simplification, and consolidation."

## AI Database - Accelerating Analytics

## for Superior Outcomes

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storage space and processing capabilities. The AI database will help to concurrently ingest, explore, analyze and visualize fast-moving, complex data within milliseconds. The ultimate goal is to lower costs, generate new revenue, and integrate Machine Learning (ML) models so that businesses can make more efficient, data-driven decisions. There are certain considerations that need to be kept in mind while selecting a database to manage the underlying data. Integration with existing software systems and AI applications, security, scalability, type of data (structured, semistructured, unstructured), and frequency of data access are key parameters to be considered while selecting databases supporting AI analytics. Which Database Should You Opt For - RDBMS or NoSQL? Traditional relational databases (RDBMS) have several limitations when it comes to accommodating AI requirements. These databases are unable to scale out easily to accommodate huge data volume or to handle unstructured data and also lack a simplified high-availability mechanism. On the other hand, nonrelational databases (NoSQL) have played an integral role in the recent advancement of technology leveraging machine learning and deep learning as their primary technological components. The ability to collect and store large volumes of structured and unstructured data has provided deep learning with the raw material needed to improve predictions. Furthermore, these databases are highly scalable, which means for any additional resource requirement in the system, a cost-effective commodity hardware plug-in is all that is required. Non-relational databases are also highly available due to the default replication model. How does NoSQL benefit AI? NoSQL brings several unique advantages to the table when it comes to handling AI applications: Achieving Superior Performance with Data Caching Along with database, we also need to understand the data caching mechanism to optimize AI performance. To accelerate the iterative computational performance, it is common to cache learning data. We have multiple options to do this: Why NoSQL is Integral to Artificial Intelligence Artificial Intelligence is being used in a variety of real-world applications today, working with a myriad data assets. To handle such vast information, NoSQL databases provide an effective mechanism for storage and retrieval of data. They also provide schema-less storage to support structured as well as unstructured data sources. NoSQL is a worthy contender in the AI databases space where strong ACID capability is not the primary requirement. However, when making the move from traditional relational to non-relational databases, enterprises should be careful about the type of NoSQL databases to select since data type and data sources are the primary determining factors. With AI and ML, a plethora of opportunties await businesses. NoSQL aptly helps explore all of them by expanding to include data lakes, image processing, recommenders, Natural Language Processing (NLP) and much more. Industry: Mahesh Kulkarni Principal Consultant -Data, Analytics & AI With 22 years of experience, Mahesh is currently part of the Database practice focusing on open source database technologies to help enterprises with digital transformation. He also supports advisory services in the Artificial Intelligence space. This includes database assessment, test data generation, data modeling, automation & providing AI solutions. His areas of interest include exploring new database technology, understanding use cases and building a knowledge repository for the practice. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire,

provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to reexamine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/david-tuppen/ ---- Contact Wipro Blogs By Author When It Comes to Big Data, Technology Is Not Everything Please fill the required details to access the content David Tuppen David Tuppen Consulting Partner, Analytics and AI Consulting, Consulting Practice, Wipro Limited David has more than 18 years of experience in designing Enterprise Data Architectures and managing teams across various industries globally. He is currently completing an M. Sc. in Information System Management (Big Data & Predictive Analytics) at the University of Liverpool. Get in touch: global.consulting@wipro.com Businesses are always looking for better ways to sell their products. If there was a way for a business to gain a competitive advantage over their competitors, why wouldn't they take it? ===============

## When It Comes to Big Data, Technology

## Is Not Everything

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new technology that is giving us the insights that we just didn't have access to before. The problem with that statement is that big data isn't new and it isn't a technology. Big data is large amounts of data, which is simply information. "Big data" has been in our libraries for hundreds of years, but when we reached the point where we started storing information electronically, that data became more easily available - but still impossible to digest without innovative technologies to do it for us. Now readily available to help us take advantage of big data are technologies like Apache Hadoop, Amazon Web Services, Apache Spark and the abundance of NoSQL data stores. Businesses are seeing the value. Giving businesses options like the ability to foresee what their customers might want to buy in addition to what they've already bought, or to know where to put their business based on human traffic - why wouldn't they want to take advantage? However, much like all tools and technologies, use them incorrectly and you'll get the incorrect results. Does that mean that companies are merely implementing the above-mentioned technologies incorrectly? Yes and no. The technology stack to use big data is a multi-layered architecture of complexity. Sameet Agarwal, who previously led the data infrastructure team at Facebook said: "big data has become too attached to the technology[...] many big data projects fail because they outlay massive, upfront resources and deploy rigid architectures that don't promote flexibility once a project is in flight." Having a shortage of skills and reliance on the technology to access big data is proving difficult for companies to take advantage of its capabilities. The other complexity isn't only around technology, though. If you don't know how to analyse your data going in and you don't know how to treat the data coming out (your insights), then storage and technology are just another one of the concerns. For example, a store certainly wouldn't recommend a lowfat diet food alternative to a person who has an eating disorder. They wouldn't offer a pack of cigarettes to an ex-smoker. And yet, there are many examples of companies where predictive analytics have gone horribly wrong and done just that. Gartner predicted that, through 2017, 60 percent of big data projects will fail to go beyond piloting and experimentation, and will be abandoned. An incompetent workman blames his tools, but if you have no work to do, then why are you searching for new tools? Big data is here as a means to show insights that simply haven't been available to us in the past. It isn't a trend. It isn't going away. But if we don't implement its use correctly, the trend of failed use cases will merely increase. Choose the right team of IT professionals to analyse your business problem, that have the right technical data skills, and understand data science analytics, and you'll be on the right path to a successful implementation. Industry: David Tuppen Consulting Partner, Analytics and AI Consulting Consulting Practice, Wipro Limited David has more than 18 years of experience in designing Enterprise Data Architectures and managing teams across various industries globally. He is currently completing an M. Sc. in Information System Management (Big Data & Predictive Analytics) at the University of Liverpool. Get in touch: global.consulting@wipro.com The insurance industry has tradionally relied on data sources such as claims history to underwrite known and measurable risk. In the early stages of the pandemic, the sudden shift to remote work triggered a flood of cybersecurity threats. Of the nearly 200 organizations surveyed in Wipro's upcoming State of Cybersecurity Report 2020, the majority (70%) report challenges maintaining endpoint security. Phishing scams spiked; 73% of organizations

cite them as their top security threat. Not all companies were born digital, but they must now adapt to the digital demands of our world's current situation. As the wave of COVID-19 traverses across the world, business resilience has emerged as a strategic avenue.

## My Mobile, My Education

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However, not all mobile solutions are created equal. It is clear that every college will benefit from leveraging mobile solutions. Campuses across universities are looking more at mobile solutions that benefit students, staff and faculty alike. This will improve student experience and help higher-education institutions in adopting new technology. Mobile innovation impacts the entire student life cycle, from increased prospect engagement to alumnus after graduation. Features like push notifications, real-time process and custom-made communications enable the formulation of a sound mobile strategy, with wide-ranging potential for customization, outreach and messaging. In addition to accommodating a varied array of apps and websites, many institutions lack integration between their mobile app and their Enterprise Resource Planning or Student Information System. Mobile apps solve those integration issues while providing the seamless mobile experience and functionality that students and campus employees expect. Working in realtime, mobile apps ensure seamless out-of-the-box integration with ERPs and total alignment with the overarching objectives of the institution. According to EDUCAUSE, "Users increasingly expect that mobile apps will allow them to do virtually everything their laptops can do (if not more), in a smooth, integrated experience." Mobile offers comprehensive functionality for students, faculty, and staff, letting them access information anytime, anywhere. With the touch of a screen, administrative staff can: Help students help themselves: At the foundation of every solution lies the premise that technology can help students succeed. Mobile shouldn't be an exception. By easing students' access to campus life, course registration, financial aid information, and communications with advisors, faculty, and staff, every interaction is faster and easier, with less time wasted and more time saved for academic achievement. Here are ways mobile apps can transform the education and student experience: Help faculty help themselves: Mobile technology can be an excellent tool to support instructors. It helps instructors keep tabs on attendance, create assignments, assign grades, track discipline, upload multimedia, generate reports, send notifications, store lessons and interact with students via chat, discussion forums and social media. Educators can use the mobile app to communicate and collaborate with students in real time to save time and optimize assets. Integrating technology with education is a great way of bringing innovation to teaching and enhancing the learning experience of students. Here are great ways faculty can take advantage of mobile apps: Conclusion For many institutions, the biggest challenge in adopting mobile applications is the lack of long-term vision. If the strategy lacks clarity, implementing mobile will tend to be expensive and overlapping. The primary focus of institutions and their business is educating students and not developing and managing mobile applications. Instead, develop a plan for long-term stability, growth, and support for mobile apps. Develop a planned, forward-thinking mobile strategy that is sustainable and maintainable. The reliability, scalability and continued evolution of mobile apps are the reasons universities and colleges trust and adopt mobile solutions. References 1. EDUCAUSE, April 2011. http://www.educause.edu/library/resources/7things-you-should-know-about-mobile-app-development Industry: Ranjan A N Managing Consultant Ranjan has spent close to 15 years developing and implementing Student Life Cycle products for leading software providers. With hands-on experience in end-to-end student administration, he has designed systems and processes to help universities meet enrolment goals and enhance student life experience. During his stint as the Scrum Master of a multi-geography team, he navigated complicated business environments and varied business objectives to deliver seamless results. Today's new age customers have ushered in the need for redefined technology enhancements, that are all about conversational interfaces and AI (artificial intelligence) assisted services. On the operational level, traditional metrics continue to be driven by productivity, and finally, at the emotional needs level, there is a requirement to address the emotional quotient of both the customer and the agent. As of July 30, 125 organizations claimed to have been affected by the Blackbaud security breach that occurred in May of this year. Of those groups, nearly half are schools or universities, highlighting a trend of increasingly complex ransomware attacks on learning institutions. To keep up and stay secure, schools need to modernize more strategically. The outbreak of COVID-19 and the way it is disrupting lifestyles and businesses is unprecedented. This change is going to be tough for universities that have traditionally found it harder to change.

=== ---- Arcticle source ---- https:// www.wipro.com/blogs/ernie-englehart/ ---- Contact Wipro Blogs By Author Medicare Advantage Plans and Compliance Challenges with Appeals and Grievances Please fill the required details to access the content Ernie Englehart Ernie Englehart Senior QA Analyst, Medicare Ernie has nearly 40 years of experience in the software industry in all aspects of the software development life cycle. He started his career as a programmer and quickly became a team leader. Ernie has written requirements and technical user guides, supported customers and led a customer support team, managed a software ticketing system, and deployed software at customer sites around the world. His focus on software quality and exceeding customer expectations led him to seek QA-related positions and become a QA lead. He obtained his Certified Software Quality Engineer (CSQE) certification from the American Society for Quality (ASQ) in 2003. Ernie now works at Wipro as the QA Lead for the Appeals and Grievances system (AG360) and also the Business Analyst for AG360. How can Health Plan case workers comply with CMS Regulations? ==============

## **Medicare Advantage Plans**

----- Arcticle source ----- https://www.wipro.com/blogs/ernie-englehart/ medicare-advantage-plans-and-compliance-challenges-with-appeals-andgrievances/ ---- About the Author Contact Wipro Please fill the required details to access the content Medicare Advantage Plans and Compliance Challenges with Appeals and Grievances January | 2019 Picture this. A case worker for a major health plan is overwhelmed with the number of appeals and grievances being assigned to her. Let's call her Jane. Jane is worried that she might not be able to complete all of them within the time frame that the plan allows. She doesn't want to miss any critical deadlines that might result in the plan being non-compliant with CMS regulations. Jane is in a tizzy considering the sheer volume of tasks that await her. But wait... All's not lost yet. AG360 saves the day! Jane can login to AG360 and take a look at the cases assigned to her. She will see a dashboard when she logs on that will show her which cases are assigned to her and how long they have been open. She can then drill down to the one she wants to work on. So Jane starts working on a standard pre-service appeal. The member is appealing the denial of a medication he needs for his migraine headaches. Jane calls the doctor's office and speaks with the doctor's nurse. She gathers that the doctor does not want the member to take this medication everyday anymore, as he was doing previously. As it turns out, it is dangerous to take it every day. Instead, the doctor is prescribing a different medication that he thinks will help with the migraines. Jane notes all this information and updates the case. She starts working on all the letters that need to go out. AG360 has the letter templates for her. Jane needs to create and send the letters. But then her supervisor (we'll call him Randy) alerts her about a new, expedited appeal that just came in. Jane needs to stop working on the first appeal and start working on the expedited appeal immediately. She tells Randy that she will get on the new case as soon as she finishes the letters. But Jane does not finish the expedited case by the end of the day. The next day, when Jane comes into work and logs in to AG360, she sees an alert telling her that

there is an Expedited Appeal that needs her attention. So she gets back onto that appeal right away, after she gets her coffee. This appeal is about a member who needs another MRI on his right knee, even though he just had one last month, which is why the health plan had denied the request. She consults with the doctor and health plan to see if they will cover another MRI. Meanwhile, Randy has run some of the AG360 reports to get a broader view of what is happening. Randy has run the Dashboard report to see how much the caseworkers have on their plates. He has run the Universe reports to see if there are any cases that are missing key dates or any that are not CMS compliant. Randy goes over to Jane's desk to speak with her about the expedited case and the other cases assigned to her. Jane tells him that she has the information about the cases and needs to enter it into AG360 and create the letters, and then she can start working on another case. Randy's team relies on AG360 to help them manage their appeals and grievances. They know that the tool will send them an email notification as cases are approaching their Due Dates so that they don't miss anything and let a case go beyond its Due Date. They respond to the login time alerting when they have expedited cases because they know that these cases need to be worked on immediately. Randy and his team use AG360's powerful search engine to help them find cases that they have worked on before, cases for the same member, or cases of the same type or category that may help them with the case they are currently working on. Randy has saved searches that they reuse as user defined reports. Randy runs AG360 reports often to get a higher view of open cases. Appeals and Grievance reports provide a case count of each type and list them out too. Universe reports can be used to show that his group is compliant with CMS regulations. To know more about Wipro's Medicare portfolio, please visit https://www.wipro.com/en-BR/healthcare/medicare-advantage-360platform/ Reference and note https://www.medicare.gov/ As per Medicare.gov, in the Medicare Advantage plan one can get Medicare benefits through Original Medicare or a Medicare Advantage Plan (like an HMO or PPO). If you have Original Medicare, the government pays for Medicare benefits when you get them. Medicare Advantage Plans, sometimes called "Part C" or "MA Plans," are offered by private companies approved by Medicare. Medicare pays these companies to cover your Medicare benefits. Who can join a Medicare Advantage Plan? You must have Medicare Parts A and B and live in the plan's service area to be eligible to join. People with end-stage renal disease (permanent kidney failure) generally can't join a Medicare Advantage Plan. Annual Enrollment Period https://www.cms.gov/Outreach-and-Education/Reach-Out/Find-tools-to-helpyou-help-others/Medicare-Open-Enrollment.html

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comparison analysis between the SharePoint 2013 and SharePoint online workloads of similar volume to provide the justification to move to cloud.

## Why make the journey to Cloud with

#### **Office 365?**

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directly as per their defined roadmap. Given in Figure 1 is a comparative analysis of the different cost factor for an upgrade/migration to the next version. Figure 1: Comparative analysis of cost for upgrade 2. IT labor cost: Figure 2 demonstrates the year-on-year labor cost (support and migration) incurred for both the environments. Figure 2: Labor cost for SP 2013 and SPO support The support cost for SPO will always be less than onpremise one, as the entire IT infrastructure is hosted in Microsoft datacenter and SPO has least option of customization options. Given the migration of legacy content to SPO was done in Y1, we can expect Y2 to be the break-even year with an decreasing support cost as governance, accelerators etc. are rapidly deployed. With minimal upgrade cost and reduced IT labour cost, SPO is clearly the next version of SharePoint that customers ideally should migrate to . With Office 365, organizations are now able to accelerate the deployment of the latest versions of Microsoft and partner solutions, decrease technology costs, increase business and IT user productivity, and stay up-to-date with the latest features and solutions. Industry: Arindam Ghosh Consultant, Application Engineering and DevOps Microsoft, Wipro Arindam has 14 years of experience in cloud and native technologies. He currently works with global clients for defining their IT strategy, which helps them to align their business goals related to Office 365 and Azure. During his career, he has been involved in multiple delivery and presales activities spread across different domains such as knowledge management, supply chain management and industries such as IT, communication and energy. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern source ---- https://www.wipro.com/blogs/suresha-ejari/ ---- Contact Wipro Blogs By Author Five ways TLS 1.3 will take your privacy and performance readiness to the next level! Please fill the required details to access the content Suresha Ejari Suresha Ejari Technical Lead at Wipro's Industrial & Engineering Services Suresha Ejari is a Technical Lead at Wipro's Industrial & Engineering Services vertical. He handles development of the Security Validation Framework and manages Vulnerability Assessment Penetration Testing. He has previously worked as a Security Expert performing threat model analysis for various hardware devices. Transport Layer Security (TLS) protocol is a successor to the Secure Sockets Layer (SSL) that provides privacy and data integrity between two communicating applications. TLS 1.3 is an advanced version and unparalleled in terms of privacy and 

## Five ways TLS 1.3 will take your

## privacy and performance readiness

#### to the next level!

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Scenario 1: Information being conveyed by the IOT device using HTTP POST with TLS1.2 Additionally, if the same IoT device talks to same server again, there will be no RTT at all. This is because the parameters chosen in the initial handshake are sent along with the application data in the first packet itself, to ensure zero RTT. Way forward The Path is set: Popular browsers like Google Chrome and Firefox have already rolled out draft versions of TLS1.3. Most of the design concerns are figured out and soon we will see TLS1.3 in all web applications. The new WebApps are going to be super secure and faster than ever. Make your Move: As the stage is set we recommend you make your move and start implementing TLS1.3 across all your IOT devices. You might have to remember one thing though - all IOT devices have space constraints, which can pose a challenge while moving to TLS 1.3. This can be mitigated using elliptic curve cryptography algorithms, which have smaller keys in TLS Certificate size, which in turn saves memory space on the connected IoT device. Industry: Suresha Ejari Technical Lead at Wipro's Industrial & Engineering Services vertical. Suresha Ejari is a Technical Lead at Wipro's Industrial & Engineering Services vertical. He handles development of the Security Validation Framework and manages Vulnerability Assessment Penetration Testing. He has previously worked as a Security Expert performing threat model analysis for various hardware devices. The consumer packaged goods (CPG) industry was badly affected by the pandemic, much like several other industries. Organizations in this industry therefore relied on retail In 2020, the pandemic rattled global supply chains As the retail sector continues to adapt and evolve to a post-source ---- https://www.wipro.com/blogs/marc-beder/ ---- Contact Wipro Blogs By Author To Office 365 or not to Office 365? Please fill the required details to access the content Marc Beder Marc Beder Practice Partner -Cloud Consulting, Modern Application Services, Wipro A strong advocate of seeing technology enable businesses to succeed, Marc has more than 15 years' experience in the IT industry across multiple verticals with a strong emphasis on Cloud computing and DevOps methodologies. Reach Marc at Marc.beder@wipro.com We utilize email as part of our everyday lives; be it work or personal use, email is ubiquitous in the 21st century. For the most part, we tend to use Cloud-based email services for personal use and have 

#### To Office 365 or not to Office 365?

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commonplace. What are we missing? Should services like Microsoft's Office 365 be the go-to standard? Let's explore some of the often overlooked areas when considering a move to Cloud-based productivity solutions and see where our organizations could be benefiting. So much email Email, being so commonplace, is often considered to be a simple solution and, much like the apps on our smartphones, we expect it to "just work". However, there are various elements that come together to make email available like we expect it to be (which is, always!). First, there is all the data we store; every email sent and received consumes storage. This means that the same storage consumed for each email is often stored multiple times (often, as a minimum, in triplicate). Next, we have the computer hardware that drives all the systems that make emails flow around our organizations. Again, in the interest of availability, the computer hardware tends to be distributed across multiple physical locations. We need to ensure that these email systems are backed up in the case of data loss - this consumes more compute and storage. Security and compliance solutions are next in line in the long list of components that come together to deliver enterprise-class email. These additional layers protect us from malicious factors while also keeping our day-to-day activity compliant with local laws and regulations governing our business activities. On top of all these systems comes the software licensing needed to enable legal usage of all these technologies. The last piece of the puzzle is the technically qualified and competent people necessary to run, maintain and support these systems and technology, which all combine to deliver that "simple" productivity tool we all know and love (or loathe) - email. No more email We now communicate in a number of ways: instant message (IM), apps, social media, to name a few. This means we need to look beyond an email-only solution to achieve the communication needs of our modern society. There are start-ups that outlaw internal email! Email is only utilized for communication outside of the organization - yes, this is an extreme example but it illustrates the changes to ways of working. Office 365 offers communication mediums like social, chat, collaboration platforms, voice, broadcast, and more. Not only does Office 365 enable an organization to abstract itself away from significant technology burden but also makes available entirely new ways of working to support the geographically dispersed, multi-disciplined and multi-generational workforces that exist in our global economy. So much more than email Many people equate Office 365 with email as it is the easiest association to make. However, Office 365 is an offering from Microsoft which goes beyond the realm of email to include offerings like the Office software license on multiple devices, access to data storage for each licensed user, Microsoft Teams, SharePoint Online, Skype for Business and so much more! In fact, Office 365 is made up of more than 20 Microsoft products bundled together under different subscription models (See Figure 1). This is where significant value can be unlocked for the organization. This is not to say that Office 365 is the answer to all our working practices and needs, but there are a number of use cases and various working initiatives (flexible working, BYOD, multigeo collaboration, etc.) that can be enabled through the adoption of Office 365. Figure 1: Application set available through Office 365 Industry: Marc Beder Practice Partner - Cloud Consulting - Modern Application Services, Wipro A strong advocate of seeing technology enable businesses to succeed, Marc has more than 15 years' experience in the IT industry across multiple verticals with a strong emphasis on Cloud computing and DevOps

methodologies. Reach Marc at Marc.beder@wipro.com Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

www.wipro.com/blogs/malay-joshi/ ---- Contact Wipro Blogs By Author Trust in the Times of Fake News Please fill the required details to access the content Malay Joshi Malay Joshi Senior Vice President & Sector Head -Communications, Media & Information technology Malay has been with Wipro for over 22 years in various leadership roles - establishing, scaling and spearheading growth across the Media and Entertainment Industry. With his current portfolio, he is responsible for digital transformation, generating new business, P&L, Delivery, Customer Experience (CX), and achieving consistent revenue growth in highly competitive markets. He has significant experience in consultative sales & client engagement, working as a trusted advisor to customers through engagement lifecycles covering solution ideation and development, commercial modelling, contracting and third-party management. He holds a management degree from Stanford University, CA and a bachelor's degree in Information Technology from Bangalore University. He is based in Greater London, United Kingdom. While there is no cure for cognitive bias, there are thankfully many ways in which technology can help in the identification and verification of fake news. 

#### Trust in the Times of Fake News

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of the story. With increased access to social media and indiscriminate sharing of our thoughts, opinions and other assorted personal information, we've opened ourselves up to companies harvesting our data. The indulgence of some in the alternate reality world has led to them playing along with headlines and news that they might have already known is false. In a Statista survey in 2016, the number of respondents who had knowingly shared "fake news" was 14%. Then there is the monetization opportunity. Increased access and sharing has led to indigenous ways of making advertising dollars. Setting up fake news sites and driving traffic to these sites leads to monetization opportunities, which has allowed trolls to have a field day. Another lesser discussed reason for the spread of fake news is the "knee-jerk reaction syndrome". The penchant for users to crave for likes / comments / shares of their posts has led to instantaneous reaction to headlines / articles. In their quest to be the first to share or react to sensational news stories, users end up not performing any due diligence about the veracity of the stories. This, oftentimes, when others might have already called out the article or story as fake even in the comments section of the same post! This raises an interesting question. Why aren't users depending upon trusted sites to consume news? This is where bias comes into play. A recent Gallup poll found that 62% of Americans believe news is biased and 44% say it's inaccurate. In times when the news media could separate fact from fiction, their own perception in the minds of consumers hinders this process. Add to this the cognitive bias that users themselves exhibit and the result is a potent mess. Each stakeholder seems to be playing a part in getting fake news to travel further and faster than real news. What is the way forward? While there is no cure for cognitive bias, there are thankfully many ways in which technology can help in the identification and verification of fake news. Here are three means to make the maximum impact in the fight against fake news: Studies have shown that bots are the most active in the first few moments of an article from a lowcredibility site being published. Bots tend to tag celebrities or others who would amplify the reach of such articles. Once the bots have done the initial work, humans typically tend to take over from there and continue the disinformation, thereby playing into the hands of the bots. With the latest technologies at our disposal, we can use bots to find such bots. The easiest way to find such bots: o Look up the IPs / geo-locations of such bots -Analyze the domain / account from which the bots are posting o Sentiment Analysis o Who follows the bots -Matching the language and the region Currently, an underutilized medium for fact checking is the user base of the social media platform (for example) itself. While there are bots or humans spreading fake information, often users challenge the article or the post by posting relevant information including links to the correct news in the comments section. Co-opting the users themselves in the battle against fake news will go a long way in arresting the problem and the fact that this approach can scale is even better. In times of fake news, the antidote would be even more viral spreading of the real news. This is where trusted news organizations would have to take the lead. Because these news organizations have journalists on the ground and digital media teams monitoring the trends on social media and in the real world, they can also team up to post the real news on their platforms. This has the dual benefit of not just overpowering fake news but driving greater engagement towards the respective news sites. There are a variety of channels through which

such organizations can amplify the real news (websites, messenger platforms, even by placing links as ads in extreme situations). A concerted effort by all the stakeholders involved (news organizations, users and technology providers) will go a long way in reducing the ill effects of fake news. A method to the madness While the easiest way to detect fake news is to run statements, data and claims through a pre-compiled database, the challenge lies elsewhere. It is not immediately predictable as to which piece of information will be used by which group or individual to target an individual / group / organization. The hallmark of a piece of "fake news" is the way information gets twisted to target or support entities. Hence, the detection of a piece of content being potentially false and the ability to identify such content from billions of pieces of content being generated becomes crucial in a scalable model for the detection and verification of fake news. Wipro has been working with leading publishers providing trust and safety solutions. As part of its trust and safety capabilities, Wipro has developed a comprehensive approach toward fake news detection and verification. The key highlights of Wipro's fake news detection and verification approach are as follows: Wipro's framework for the detection and verification of fake news is a combination of human and machine intelligence with 90 percent of the process being automated. The process is verifiable, repeatable and scalable. Industry: Malay Joshi Senior Vice President & Sector Head - Communications, Media & Information technology Malay has been with Wipro for over 22 years in various leadership roles - establishing, scaling and spearheading growth across the Media and Entertainment Industry. With his current portfolio, he is responsible for digital transformation, generating new business, P&L, Delivery, Customer Experience (CX), and achieving consistent revenue growth in highly competitive markets. He has significant experience in consultative sales & client engagement, working as a trusted advisor to customers through engagement lifecycles covering solution ideation and development, commercial modelling, contracting and third-party management. He holds a management degree from Stanford University, CA and a bachelor's degree in Information Technology from Bangalore University. He is based in Greater London, United Kingdom. Fan engagement may have started off as a means to engage fans before, during and after a game, as an always-on means of connect between the club and the fans Digital transformation" is the buzzword floating around business today. It has many definitions and means different things to different people. www.wipro.com/blogs/bhushan-bagi/ ----- Contact Wipro Blogs By Author OA strategy to consider for IT modernization: shifting paradigm of the digital word Please fill the required details to access the content Bhushan Bagi Bhushan Bagi Consulting Partner, Wipro Bhushan has 17+ years of experience in the financial services and communication industry around software development and quality engineering. He drives digital consulting, solution architecture and service delivery for global customers. Per Forrester's CEO, a majority of organizations expect 47% of their total 

### QA strategy to consider for IT modernization:

### shifting paradigm of the digital world

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very limited. To get a higher ROI, there is a need to modernize them with a cloud-first approach, where the applications can be easily assembled, are easy to update and maintain, and can be ready to be delivered in an as-aservice mode. Infrastructure Modernization In conjunction with application modernization, the infrastructure modernization journey starts with analyzing its fitment for the current adoption scenario but it loses its value with increase in demand. For organizations that adopt cloud, infrastructure is guickly modernized and its business value grows as cloud infrastructure leads to drastic reduction in deployment times from weeks to hours. Cloud adoption interconnects the complete ecosystem with the business stakeholders or partners, which leads to the emergence of a seamless hybrid infrastructure supported by processes and teams that use DevOps methodology and further positioned as software as a service. As the infrastructure is further modernized, IT teams use infrastructure as a code, automated provisioning & self-healing techniques to strengthen their business value. Per IDC, about 80% of IT organizations are set to adopt a hybrid cloud strategy by 2020 and 60% of enterprises are set to adopt DevOps methodology by 2020 per Forbes. In order to achieve optimal speed, scalability and reliability, there is a need for organizations to modernize legacy infrastructure into a more flexible, hybrid and automated environment. Workplace Modernization In the digital world, there is an increasing demand of employees empowered with collaboration tools to work smarter. In the legacy or a conventional environment, an outdated platform or operating system limits the usage of modern applications and resists the modern working styles. At this stage, if an organization has introduced various methods of collaboration, the effect of it will be very limited with a very low business agility. Hence, modernizing legacy workplace is a stepping-stone toward a smart digital workplace. As we modernize the workplace and business with complete integration of applications, a fully enabled workforce aligned with new-age digital devices, our workforce tends to gain seamless experience across platforms, applications and the self-service portals in place for most user requirements. This makes the workplace environment more dynamic and enterprises see more agility and reliability that in turn leads to increase in realization of business value. Analysis of various QA approaches across different types of modernization In the world of digital transformation, traditional enterprises struggle to live up to end-user expectations. In order to adopt rapid digital transformation, these enterprises are looking for robust end-to-end quality assurance (QA) techniques supported by automation. The below table indicates which OA techniques are best suited to all three types of modernization techniques. 'Yes', 'no' and 'maybe' represent the degree of applicability and effectiveness for a particular type of modernization, keeping in mind the overall business operations. Table 1: QA approaches mapped to different types of modernization The road ahead Modernization is the key pillar in the world of digital transformation. The success of the modernization strategy depends on the effectiveness of execution. Without the right level of execution, commitment of leadership, the culture, and the overall ecosystem, success will be limited. Hence, it requires businesses to understand all the three layers of IT modernization and it needs enterprises to think deeper on how the journeys of each of the three stages can be planned and implemented. The right approach followed can offer significant cost optimization, optimize time to market & ensure seamless customer

experience. References: Industry: Bhushan Bagi Consulting Partner, Wipro Bhushan is business consulting leader at Wipro with immense experience in the financial services and communication industry around software development and quality engineering. He drives digital consulting, solution architecture and service delivery for global customers. Rajesh Puthan Managing Consultant, Wipro Rajesh has 17+ years of experience in driving quality engineering programs across domains. He primarily works as a consultant to help global clients navigate the journey from quality assurance to quality engineering. He also carries additional charter to drive assurance for modernization programs. Ankur Jain Consultant, Wipro Ankur is instrumental in driving consulting engagements in software development and quality engineering. His current mandate is to drive modernization assurance engagements. He is an engineer from NIT - Jaipur and completed his MBA from IIM - Kozhikode. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern source ----- https://www.wipro.com/blogs/teresa-tere-traub/ ----- Contact Wipro Blogs By Author What Digital Transformation Means for Higher Education in 2019 Please fill the required details to access the content Teresa (Tere) Traub Teresa (Tere) Traub Managing Consultant Teresa (Tere) Traub joined Appirio after 20+ years of building and scaling global businesses. In her most recent role, she helped the University of Texas System develop an educational marketplace on the Salesforce platform. Before that, she managed B2B and International Outreach and Admissions groups and was also part of the EdTech Innovation Group at Kaplan University. Digital transformation" is the buzzword floating around business today. It has many definitions and means different things to different people.

### What Digital Transformation Means

#### for Higher Education in 2019

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today. It has many definitions and means different things to different people. Despite the lack of consensus about its meaning, digital transformation isn't going anywhere - it's here to stay and is already impacting a lot of industries, including Higher Education. Why digital transformation for Higher Education? Students are coming to higher education institutions with expectations for certain types of experiences from their daily lives. They expect these institutions to understand them, guide them, connect them to the right people, and consistently delight them. Meeting (and even exceeding) these expectations directly impacts student experience and ultimately, the higher education institution's bottom line, too. Digital transformation permeates all aspects of Higher Education, including: External constituents - (students, alumni) to the internal constituents (faculty, staff, administration) Learning - digital content, personalized learning, interactive classrooms, instructional design Engagement academic support and delivery Staffing models that support interactions Digital learning - instruction, assessment learning materials, personalized learning Tutoring - Chatbots Student Services - advising support, student assessment, outreach/alert, registration, and recruitment Expanding the classroom - 24/7 access, anywhere, on any device (mobile ready) Increased accessibility - providing higher education opportunities to those who lack them What digital transformation really means for Higher Education Digital transformation is more than just an idea. It's having the capability to do things differently and the intelligence and ability to adapt to changes in the marketplace to address the changing needs and expectations of internal and external constituents. Why is digital transformation difficult for Higher Ed? Many higher education organizations are stuck in decentralized, traditional siloed systems and departments. Breaking down the silo mentality isn't easy. Bringing people together and fostering collaboration is key, but it isn't easy. Change comes with anxiety. Employees in higher education (just like in any other organization) are used to doing their work in a particular way. Decision-making is usually slower in hierarchically structured organizations. Lack of technical maturity and technology readiness in users. How digital transformation works for Higher Education (and what it requires): Gaining executive buy-in Laying the groundwork - having a solid foundation before you can take full advantage of digital transformation Understanding the overall internal and external constituent experience - where it currently is and where you want it to be - and creating a roadmap to get there How to get started: Start with an overall strategy but don't do this in isolation. Don't leave the strategic decisions to one department only. Try to encourage and nurture a culture of collaboration. You can start with a small group for a launching point but move toward incorporating all groups as part of the rollout. Strategy also includes data strategy. When data is harnessed, it can be a game-changer that can help you realize the full impact of your digital transformation. To integrate data into strategy, you should: Know where your data is coming from Know what data is collected Know what data you are tracking and why Know what you're trying to measure and how to filter large volumes of data Have data governance in place to meet compliance regulations Don't underestimate the need for change management - when done correctly, it will result in culture change. However, it's important to make sure you have the right skill sets and that digital transformation is a journey with many steps. Digital transformation will enable Higher Education to: Build highly matrixed organizations that interact across lines,

business models, and support models. Harness the power of the data leading to predictive and proactive actions across all aspects of a university. What digital transformation leaders care about... In a recent survey conducted by Navitas Ventures, University leaders cited the following expectations of their digital transformations. Improving the student experience and meeting changing students' needs were the top two outcomes of effective delivery. (1) Evolving for the future A digital platform that empowers collaboration between business and IT isn't enough for a full digital transformation - you need a new strategy designed around digital to enable your business to work smarter, faster and at scale, and innovate new products and services. That's why Higher Education organizations need to think beyond research and basic educational services. They need to expand and shift their perspective to align with those of their constituents. Evolving to a constituent-centric mindset is essential to staying relevant and competitive and laying the foundation for future growth. Next Steps As a global leader in Higher Education digital transformation strategy, Appirio, A Wipro Company, can help you at every step of the way - from identifying ways to drive positive results; to providing a custom-tailored Salesforce implementation roadmap, we're here to make sure you seamlessly get from point A to point B. Note: The article is also available on the Appirio website, A Wipro Company. Visit the Appirio Nonprofit and Higher Education Hub to learn more about the latest developments and trends in this exciting space. Source: 1. https:// www.navitasventures.com/wp-content/uploads/2017/08/HE-Digital-Transformation- Navitas Ventures -EN.pdf Industry : Teresa (Tere) Traub Managing Consultant Teresa (Tere) Traub joined Appirio after 20+ years of building and scaling global businesses. In her most recent role, she helped the University of Texas System develop an educational marketplace on the Salesforce platform. Before that, she managed B2B and International Outreach and Admissions groups and was also part of the EdTech Innovation Group at Kaplan University. Fan engagement may have started off as a means to engage fans before, during and after a game, as an always-on means of connect between the club and the fans While there is no cure for cognitive bias, there are thankfully many ways in which technology can help in the identification and verification of fake news. The articles explores the https://www.wipro.com/blogs/ankur-jain/ ---- Contact Wipro Blogs By Author Data Monetization: New oil of the digital world Please fill the required details to access the content Ankur Jain Ankur Jain Consultant - Quality Engineering & Testing, Wipro Ankur is instrumental in driving testconsulting engagements. He has completed Engineering in Electronics and Communication from NIT, Jaipur and MBA from IIM Kozhikode. Multibillion dollar acquisitions of companies with relatively small revenue are 

## Data Monetization: New oil of the digital world

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to optimize their process and products. Key challenges of data monetization Organizations that are implementing analytics programs to carry out data monetization face four critical challenges: Data monetization strategy The strategy and framework for data monetization will constantly evolve, but consistent commitment to win through advanced data analytics and innovation across the value chain is important. To lay down a successful data monetization strategy, organizations should begin by: In parallel to this, organizations should internally brainstorm these assessment questions: Towards a digital future Data monetization is the next frontier in the world of digital transformation. The success of the data monetization strategy depends on the effectiveness of execution. Without the right level of execution, commitment of leadership, the culture, and the overall ecosystem, success will be compromised. Organizations may choose to monetize the data with any approach but utmost commitment from the key stakeholders from every management function is important. It has been seen that data monetization projects with realistic targets deliver the greatest ROI. Reference Industry: Bhushan Bagi Consulting Partner, Wipro Bhushan has over 18 years of experience across the finance (banking & insurance), enterprise & telecom industries in software development and quality engineering - digital consulting, solution architecture and service delivery across USA, Europe and APAC. Ankur Jain, Consultant Quality Engineering & Testing, Wipro Ankur is instrumental in driving test-consulting engagements. He has completed Engineering in Electronics and Communication from NIT, Jaipur and MBA from IIM Kozhikode. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

www.wipro.com/blogs/scott-dunn/ ----- Contact Wipro Blogs By Author What you should expect from digital lending solutions in 2019 Please fill the required details to access the content Scott Dunn Scott Dunn Head of Product Management and Strategy, Compliance Wipro Gallagher Solutions, LLC. Scott Dunn is the Head of Product Management and Strategy. Compliance at Wipro Gallagher Solutions (WGS), a provider of end-to-end lending solutions for financial institutions. As head of Product Management and Strategy, Dunn is responsible for the vision and future direction of the LOS platform that includes enhancements to technology in the WGS suite of products. Dunn also assists customers in a consulting role to improve process, procedure and key roadmap initiatives. Dunn is responsible for all regulatory compliance initiatives pertaining to the WGS product offerings and serves as the head of the Compliance Center of Excellence, an internal organization specializing in compliance issues associated with Dodd-Frank, RESPA, TILA, HOEPA, HPA, ECOA, FCRA and SAFE. He currently leads the compliance strategy for WGS and is a trusted advisor regarding regulatory issues for the entire customer base. Dunn has more than 19 years of experience in banking and financial services technology and operations.

### What you should expect from digital

#### lending solutions in 2019

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capabilities, and lowered costs are becoming a reality with digital solutions. To find out more about the capabilities that your lending solution must have to future-proof itself contact us. Our experts, whose award-winning platforms have helped develop versatile solutions for some of the top global lenders, will brainstorm to meet your innovation agenda. Reference 1 https://www.aba.com/Products/Endorsed/Documents/ABADigitalLending-Report.pdf 2 https://www.researchandmarkets.com/reports/4668457/digitallending-platform-market-by-solution Industry: Scott Dunn Head of Product Management and Strategy, Compliance Wipro Gallagher Solutions, LLC. Scott Dunn is the Head of Product Management and Strategy, Compliance at Wipro Gallagher Solutions (WGS), a provider of end-to-end lending solutions for financial institutions. As head of Product Management and Strategy, Dunn is responsible for the vision and future direction of the LOS platform that includes enhancements to technology in the WGS suite of products. Dunn also assists customers in a consulting role to improve process, procedure and key roadmap initiatives. Dunn is responsible for all regulatory compliance initiatives pertaining to the WGS product offerings and serves as the head of the Compliance Center of Excellence, an internal organization specializing in compliance issues associated with Dodd-Frank, RESPA, TILA, HOEPA, HPA, ECOA, FCRA and SAFE. He currently leads the compliance strategy for WGS and is a trusted advisor regarding regulatory issues for the entire customer base. Dunn has more than 19 years of experience in banking and financial services technology and operations. The Metaverse is collapsing the physical and virtual worlds to create a paradigm shift in interactions between customers, suppliers, partners, employers and employees. It's every company's worst nightmare. In 2019, a global metals manufacturer experienced a ransom-ware attack in which hackers seized and encrypted its computer files, then demanded payment to unlock them. Agility as a concept has been discussed for years, though the competitive advantage of being more agile came into sharp focus in 2020. The increased pace of change, rapidly evolving customer needs, compressed timeframes for responding — all of these and more drove the topic back onto every https://www.wipro.com/blogs/dr-gopala-krishna-behara/ ---- Contact Wipro Blogs By Author Enterprise Architecture Metrics: The Need of the Hour EA Framework for DevOps Adoption Microservices Governance Agile and Enterprise Architecture: A Strategic Alliance Please fill the required details to access the content Dr. Gopala Krishna Behara Dr. Gopala Krishna Behara Distinguished Member of Technical Staff and Lead Enterprise Architect at Wipro Technologies Dr. Gopala Krishna Behara is a Distinguished Member of Technical Staff and Lead Enterprise Architect at Wipro Technologies. He is a Certified Open Group TOGAF, AWS Solution Architect, IBM Cloud Solutions and serves as an Advisory Architect, Mentor on Enterprise Architecture, Next Generation Architectures, Application Portfolio Rationalization and Architecture Assurance initiatives, and continues to work as a Subject Matter Expert and Author. He has worked on multiple architecture transformation engagements in the USA, UK, Europe, Asia Pacific and Middle East Regions that presented a phased roadmap to transformation that maximized business value, while minimizing costs and risks. He has published white papers, blogs and articles in international journals in SOA, BPM, Open Source and Next Generation Technologies & e-Governance space. Dr. Behara has also published books titled "Enterprise Architecture

Practitioner Hand Book", "Next Generation Enterprise Reference Architecture for Connected Government" and "Microservices Practitioner Guide". He is the recipient of the EA Hall of Fame - Individual Leadership in EA Practice, Promotion and Professionalization Award, 13th Annual Enterprise Architecture Conference, Washington, D.C., USA. Measuring the performance and progress of an organization's Enterprise Architecture (EA) gives the Enterprise Architecture team an opportunity to identify areas where they need to focus, in order to ensure that EA is functioning properly and delivering the intended value. DevOps promotes agile methods to operations. It provides the collaboration between development and operations teams. It aims to decrease the time between applying a change to a system and the change transferred to the production environment. Methodology or approach to establish policies, standards, best practices and guidelines on the adoption of Microservices to enable enterprise agile IT environment. The 3 pillars of Enterprise Architecture are Alignment, Insight and Ouality. ============

### Agile and Enterprise Architecture: A

#### Strategic Alliance

----- Arcticle source ----- https://www.wipro.com/blogs/dr-gopala-krishnabehara/agile-and-enterprise-architecture-a-strategic-alliance/ ----- About the Author Contact Wipro Related Blogs Are Australian firms making a mistake with RPA? Part 3 of Deep Learning - Building the Next Generation of Edge Devices Improve, change, or displace? Please fill the required details to access the content Agile and Enterprise Architecture: A Strategic Alliance February | 2019 Introduction The 3 pillars of Enterprise Architecture are Alignment, Insight and Quality. Alignment: Enterprise Architecture (EA) aligns strategy to operations, business demand to IT supply and ensures that the changes are in line with enterprise strategy and goals. Insight: EA provides insight into current and desired states of the organization, information systems and technology. Quality: EA helps to improve quality of individual solutions, simplifies their development and maintenance. Some of the challenges that enterprises face today include: Pitfalls in EA Adoption Organizations focus on the technical aspects of EA, as most of the EA initiatives are driven by CIO organizations or IT directors. The Enterprise Architecture Team spends lot of time in selecting an EA framework and EA tools, as opposed to customizing and using it to develop Enterprise Architecture. Enterprise Architects are frequently dragged into operational activities or routine project work. This means that while they are appearing to be productive, in fact they are doing little to solve the problems of the organization at an enterprise level. Today, the perception toward architects across the industry is changing. Enterprise architects are expected to code in order to earn respect across the organization. An enterprise architect is also expected to get involved not only in the strategy stage but also in endto-end implementation. He/she needs to work very closely with the business

in defining the business strategy of an enterprise. In addition, he/she should oversee how to realize the business strategy in the form of implementation. Based on the above issues, there is a need for agility in defining enterprise architecture. The following sections articulate the link between agile and enterprise architecture. Also explained in detail is the role of an enterprise architect in agile development. Agile Enterprise Architecture Agile is a methodology used for software development and project management. In Agile methodology, individual projects are broken down into smaller, more easily managed segments in order to speed up the design process and produce a quality product as quickly as possible. Agile Architecture is collaborative, lean and adoptable. It supports innovative and adoption of digital technologies by agile enterprises. Agile EA Framework In the Agile way, the focus of an enterprise architect is: The Agile EA Framework (AEAF) helps in breaking barriers between IT and business, ideally with increasing levels of co-location by unit and with fast forming teams that coalesce for new projects. Minimum Viable Product (MVP) evolves and improves with iteration based on real-time customer feedback. Agile Enterprise Architecture helps in transforming the enterprise to digital by building new architecture that supports Cloud, DevOps, Microservices, Data Analytics, Test Automation and APIs. The AEAF helps in defining architecture using an iterative life cycle, allowing the architectural design to evolve gradually as the problem and the constraints are better understood. The architecture and the gradual building of the system must go hand in hand and the subsequent iterations address the architecture issues and address architecture decisions to arrive at a flexible architecture. The AEAF covers the details of each activity, purpose and relationship between them in the following sections. Agile EA Planning This step covers the Fig 1: Agile EA Framework a) architecture vision and upfront planning. The scope addresses the business problem and concerns of the stakeholders. Architecture Vision provides the documentation to get permission to proceed developing target architecture. It covers the scope of the problem and stakeholder concerns. It also addresses Stakeholder priority and preferences. The architecture backlog covers the value, complexity, dependency and urgency of the product. b) Agile Architecture Definition During this step, the definition of domain architectures covering business, application, data and technology are covered. A set of domain architectures approved by stakeholders for the problem being addressed, with a set of gaps, and work to clear the gaps understood by the stakeholders. It also addresses the changes that enable the enterprise to meet the preferences of stakeholders. As part of definition, conduct the iteration planning, daily stand-ups. Generate Burn up/burn down charts. Daily stand-up and self-organizing teams work together to develop architecture. c) Agile EA Taxonomy Agile EA taxonomy covers the artifacts like agile architecture principles, agile values adopted across enterprise, etc. It also covers the best practices, guidelines and checklists that the Agile Architecture domain artifacts adhere to. Each sprint delivering useful parts of a working product. The core of the EA backlog is a properly limited EA Landscape. Working Product articulates the outcome expected without going into the details of how something has to be developed and executed. It limits the work to be performed to a relatively short time interval, to minimize the amount of work in progress. It identifies its predecessor and successor packages. The work product is traceable to an objective, so that when its delivery is delayed or fails altogether, the

enterprise faces the consequence of altering the target architecture. d) Implementation Instead of a big bang approach where decisions are made about the architectural needs for an entire program, agile teams take an incremental approach - ensure design is extensible and aligned with the vision while detailing out and catering to enterprise needs. In order to be most effective, it helps when the architecture group continues to look at the bigger picture while the team(s) focus on their sprint-based deliverables. Decisions should be made together to ensure the right balance - whether it's agreement to the phases of the project from a business value standpoint, acceptance of new technical debt or the design details for a particular framework or a component. As an enterprise architect of an agile architecture implementation, the focus should be on: e) Organization EA Practice needs to build with the agile enterprise environment. The Architecture team must comprise Enterprise and Solution Architects from the agile teams too. The Business Architecture team is the combination of enterprise architects and business experts. EA Team needs to work closely with agile teams on a daily basis to ensure successful execution towards the vision while incorporating the challenges and feedback from the teams and customers along the way. Agile Lead Architect: Promote the agile approach across the enterprise. Acts like a servant leader, facilitator. Helps the team in smooth execution and removes any roadblocks. Agile Lead Architect (ALA) is the best product owner for the enterprise architecture product. As a product owner, the ALA identifies the architecture required by an organization. The ALA owns the acceptance criteria used in the EA development sprints. Enterprise Architects: Part of the agile team helps to develop, improve and sustain enterprise architecture. Agile architects are active members of development teams, developing software where appropriate and acting as architectural consultants to the team. Agile Team: Services are small and developed by small teams. Agile makes it possible to release frequently in small chunks and hence show business progress. Follow CI/CD to increase the level of EA Repository This helps in storing all agile architecture and resilience. f) development artifacts. g) Agile EA Governance Model Agile governance is all about creating value across the organization, not just within an individual project. Agile governance is to create a bridge between an organization's management and the teams that are completing projects. An established Agile EA Governance Model: Summary It is not EA versus Agile. Agility plays a major role in enterprise transformation. This transformation has four dimensions: Functional, Technical, Operational and Business Transformation. In all four dimensions, EA and Agile complement each other. In agile, the architect needs to stay invested with the team throughout. He/she needs to be a visionary and at the same time, manage change and complexity, get involved in the project right from the definition of functional specifications, jointly review functional specifications with the business team to understand expectations and make sure that what is written is what is expected. Continuously check with the team to make sure they are not deviating from the stated design. Many a times, an architect will have to protect the team from unwanted bureaucracy. The product owner, agile architect and team shall jointly decide sprint scope. The architect intervenes only in case of issues during the scoping or changes introduced at the last moment. Next, demo the sprint output to business for customer feedback and accommodate necessary changes. The team needs to

have the right combination of experienced and newbie engineers. Though agile, he/she does not recommend documentation explicitly, but creates the documentation as much as required to ease the life of support teams in the future. Industry: Dr. Gopala Krishna Behara Distinguished Member of Technical Staff and Lead Enterprise Architect at Wipro Technologies. He is a Certified Open Group TOGAF, AWS Solution Architect, IBM Cloud Solutions and serves as an Advisory Architect, Mentor on Enterprise Architecture, Next Generation Architectures, Application Portfolio Rationalization and Architecture Assurance initiatives, and continues to work as a Subject Matter Expert and Author. He has worked on multiple architecture transformation engagements in the USA, UK, Europe, Asia Pacific and Middle East Regions that presented a phased roadmap to transformation that maximized business value, while minimizing costs and risks. He has published white papers, blogs and articles in international journals in SOA, BPM, Open Source and Next Generation Technologies & e-Governance space. Dr. Behara has also published books titled "Enterprise Architecture Practitioner Hand Book", "Next Generation Enterprise Reference Architecture for Connected Government" and "Microservices Practitioner Guide". He is the recipient of the EA Hall of Fame - Individual Leadership in EA Practice, Promotion and Professionalization Award, 13th Annual Enterprise Architecture Conference, Washington, D.C., USA. In 2018, Gartner reported that Australia's Robotic Process Automation (RPA) industry had registered ~2x growth over the previous year, seeing a 48 per cent rise in total revenues. Part 3: What Are the Architectural Aspects of Edge Devices Needed for Deep Learning? Innovation management as the new 

#### **Microservices Governance**

----- Arcticle source ----- https://www.wipro.com/blogs/dr-gopala-krishnabehara/microservices-governance/ ---- About The Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Microservices Governance April | 2019 Microservices Governance is a methodology or approach to establish policies, standards, best practices and guidelines on the adoption of Microservices to enable enterprise agile IT environment. Microservices promote the polyglot model regarding technology stack for supported languages, tools, and data stores. Reusability of assets and tools is the main concept of Microservices, rather than centralized. A decentralized model is best suited for Microservices governance. Decentralized governance gives Microservices teams the freedom to develop software components using different stacks. Microservices governance framework emphasizes on: Business Technology Organizational Elements of Microservices Governance A strong Microservices Governance foundation contains three elements: people, process, and technology. For a successful functioning governance, these three elements must align. The following diagram demonstrates these elements, Guiding Principles Some of the key guiding principles for

establishing successful Microservices governance are: People The focus of a Microservices architecture team is to manage and monitor enterprise activities in designing the enterprise application based on Microservices technology. It provides the right function to end users and the appropriate operational support for new architecture. MS Organizational Model In enterprise level Microservices adoption, team structure and skills play a major role rather than technology. Flat organization structure and flexible, effective and skilled teams across cross-functional abilities are the key for the success of the Microservices adoption. Skills & Competency A Microservices team consists of various members with different skill sets such as system analysts, UX/UI designers, backend and frontend developers, etc. The teams are responsible for their project (Microservice) from end to end. The size of the team depends on the size of the enterprise along with the project being developed. Experience shows the ideal size is 8-10 people per team. MS Strategy & Roadmap Agile and DevOps Environment: Services are small and developed by small teams. Agile makes it possible to release frequently in small chunks and hence show business progress. Instead of deploying one application, the team would be deploying many services. Data Strategy: An MDM strategy is required to support the distribution of data. Consumption of Core data of an enterprise, done by multiple Microservices to be stored in their local databases. Technology Reference Architecture Microservices architecture offers enterprises many advantages like independent scalability of diverse application components to faster, easier software development and maintenance. Registry Usage of dynamic registries helps to track the services that are deployed and monitored. These registries provide lookup addresses to the consumers of the services. Tools To achieve a highly scalable architecture using Microservices requires tools to manage additional services and application components, including: Cloud & API API is used to establish the interaction between the Microservices. which helps the application to work properly. Infrastructure Management Infrastructure management monitors storage, CPU consumption, memory consumption, and hardware network characteristics for deployed services. If a service is deployed on an IAAS or PAAS platform, then the respective cloud or platform management tools are used. Service Monitoring This involves monitoring the application service deployments for uptime, and health. Services can report their health by Pull mechanism via JMX, or exposing an HTTP URL. Process Federated Teams and DevOps In a Microservices environment, developers keep adding and removing functionalities frequently. Developers change the code all the time implying that Microservices are constantly evolving. The way an application is broken down into numerous interdependent services, large and siloed teams are broken down into small, multifunctional teams. The development, testing teams transform into smaller DevOps teams. The team that builds the Microservice owns its implementation and maintenance. Design Time Independence Defining and controlling the service creations, design, and implementation of service policies. Runtime Independence API Gateway helps to realize Run time governance at a dedicated component level. Data Management Each Microservice has a separate physical data store and polyglot persistence that lets a variety of database engines run under each Microservice. Summary In summary, Microservices adopt decentralized governance, which means that standards enable the team to better build and deploy the code that they have created according to their individual

governance plans. The goal of decentralized governance is to free development teams to solve development problems more efficiently and with greater speed. It is important to develop a Devops mindset within the enterprise so that developers are more in control of how their individually governed components are built and operated. Industry: Dr. Gopala Krishna Behara Distinguished Member of Technical Staff and Lead Enterprise Architect at Wipro Technologies. He is a Certified Open Group TOGAF, AWS Solution Architect, IBM Cloud Solutions and serves as an Advisory Architect, Mentor on Enterprise Architecture, Next Generation Architectures, Application Portfolio Rationalization and Architecture Assurance initiatives, and continues to work as a Subject Matter Expert and Author. He has worked on multiple architecture transformation engagements in the USA, UK, Europe, Asia Pacific and Middle East Regions that presented a phased roadmap to transformation that maximized business value, while minimizing costs and risks. He has published white papers, blogs and articles in international journals in SOA, BPM, Open Source and Next Generation Technologies & e-Governance space. Dr. Behara has also published books titled "Enterprise Architecture Practitioner Hand Book", "Next Generation Enterprise Reference Architecture for Connected Government" and "Microservices Practitioner Guide". He is the recipient of the EA Hall of Fame - Individual Leadership in EA Practice, Promotion and Professionalization Award, 13th Annual Enterprise Architecture Conference, Washington, D.C., USA. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. ============

### EA Framework for DevOps Adoption

---- Arcticle source ---- https://www.wipro.com/blogs/dr-gopala-krishna-behara/ea-framework-for-devops-adoption/ ---- c) Platform Implementation Repositories Summary About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content EA Framework for DevOps Adoption July | 2019 DevOps EA Framework DevOps promotes agile methods to operations. It provides the collaboration between development and operations teams. It aims to decrease the time between applying a change to a system and the change transferred to the production environment. The goals of DevOps are to make improvements across all components in the product and service delivery. They include: The following diagram depicts the DevOps EA framework for the DevOps adoption. a)

Planning DevOps Readiness The DevOps Architect along with the DevOps SMEs engage in conversation with the respective customer teams, and analyze the current DevOps capabilities and the tools usage across enterprise. This provides the DevOps adoption maturity level of an Organization. DevOps Planning and Road mapping The DevOps architect and the team analyze the existing applications for CICD scope and estimate the enterprise applications that can be part of CICD. Identification of applications for the DevOps adoption is carried out based on the inputs provided by stakeholders and high-level analysis. Roadmap is developed to implement new DevOps processes, to improve the existing processes and the list of tools identified as part of the planning stage. Baseline Measurement The following data needs to be agreed upon and captured across the enterprise by an Architect in consensus with the development teams: Pilot Applications Identification Business impact, user base, criticality of the application being assessed and documented for the pilot implementation. DevOps Solution Blue Print Solution Blueprint addresses implementing Continuous Integration (CI), Continuous Testing (CT), Continuous Deployment (CD) and Continuous Change Management (CCM) subsystems. Architecture Principles The core architecture Principles are: Solution Definition DevOps Process Definition DevOps Processes will transform the enterprise from current to future state across all dimensions. The Solution approach would be multi-dimensional across people, process, tools & automation, and data to enable enterprise objectives. Tools Selection The following are the DevOps tools selection design principles: DevOps Tool Chain Identification A DevOps toolchain is a set or combination of tools that aids in the delivery, development, and management of applications throughout the systems development life cycle. DevOps toolchain improves the productivity, speeds up time to market, reduces risk and increases quality. Tools Integration A seamless cross-tool collaboration is very important in DevOps implementation. Just deploying the right set of tools to the right users is not enough. Proper connectivity between and across the DevOps tools chain is necessary to create a collaborative work environment around the Dev and Ops teams. A repository stores two types of artifacts, i.e. releases and snapshots. Release repositories are for stable, static release artifacts and snapshot repositories are frequently updated repositories that store binary software artifacts from projects under constant development. Configuration Management Configuration Management helps in establishing and maintaining consistency in applications' functional requirements and performance. Tool Configuration and Tool Architecture Tool architecture has to support application changes without release (e.g., late binding). The architecture has to be scalable, secure, available and reliable. It has to address the implementation of High Availability Infrastructure. d) Operations Feedback and Monitoring In the DevOps approach, due to the automated delivery pipeline, constant feedback and monitoring become easy across the organization. Frequent Releases Version controls, updates, and releases continuously monitored by using DevOps Tools. Metrics An architect along with the organizational leadership defines Metrics or KPIs. The measurable KPIs are: Service Monitoring Monitoring services will ensure the Hardware components, OS, middleware, Application, DB and networking covered for performance, availability, utilization, capacity, trends, and recommendations on operational improvements. DevOps Analytics DevOps leverages analytics and machine

learning to automate the manual tasks involved in incident detection, troubleshooting and root cause analysis. e) DevOps EA Governance Enterprise Architect: Helps to develop, improve and sustain enterprise architecture. DevOps Architect: Promote the DevOps adoption approach across the enterprise. Automation and Tools Lead: Drives all the tool implementations across the enterprise. DevOps Engineers: Manage the entire application lifecycle while responding to feedback and analytics collected from the running application. Adjust enterprise EA practice to be consultative in the context of cultural change. The success of DevOps in an organization can be achieved by: To get maximum benefit from the DevOps implementation, focus shall be on three key areas - change of culture, connection of processes, and common tooling. This is crucial to reduce development-to operations costs and minimize change-related outages. DevOps Architect plays a major role in enterprise DevOps adoption. They promote real-time, rapid, automated, and efficient development culture among the software development and operations teams. Industry: Dr. Gopala Krishna Behara Distinguished Member of Technical Staff and Lead Enterprise Architect at Wipro Technologies He is a Certified Open Group TOGAF, AWS Solution Architect, IBM Cloud Solutions and serves as an Advisory Architect, Mentor on Enterprise Architecture, Next Generation Architectures, Application Portfolio Rationalization and Architecture Assurance initiatives, and continues to work as a Subject Matter Expert and Author. He has worked on multiple architecture transformation engagements in the USA, UK, Europe, Asia Pacific and Middle East regions that presented a phased roadmap to transformation that maximized business value, while minimizing costs and risks. He has published white papers, blogs and articles in international journals in SOA, BPM, Open Source and Next Generation Technologies & e-Governance space. Dr. Behara has also published books titled Enterprise Architecture Practitioner Hand Book, Next Generation Enterprise Reference Architecture for Connected Government and Microservices Practitioner Guide. He is the recipient of the EA Hall of Fame - Individual Leadership in EA Practice, Promotion and Professionalization Award, 13th Annual Enterprise Architecture Conference, Washington, D.C., USA. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. ============

### Enterprise Architecture Metrics: The Need of the Hour

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Today, most organizations have no mechanism to measure the effectiveness of EA, there being very little guidance on the measurement of EA effectiveness. Most organizations focus on the definition and completeness of their EA and the maturity of their EA development processes rather than measuring the effectiveness of their EA. Challenges in measuring the effectiveness of EA Traditionally, Enterprise Architecture has been measured on the immediate benefits that it provides to the organization. Although EA has a significant impact on how the IT organization aligns with Business, if EA metrics are only limited to measuring Business-IT alignment, they will fail to measure the long-term effect of EA, and more importantly, its effect on business, as an enabler and catalyst of change. Based on the author's interactions with various customers, the following are the practical challenges that they encountered in measuring the effectiveness of EA: Why measure EA EA effectiveness is the degree to which the objectives of EA are attained by means of EA. EA metrics not only help gauge the long-term effect of EA, but also help measure the true value of EA. This enables the organization to plan more effectively and efficiently. Measuring EA effectiveness is necessary to: Measurement should: EA metrics measurement framework Periodic monitoring and measurement of a set of defined EA Metrics leads to a successful EA Program across the organization. As EA goals and processes are very broad, YoY (Year on Year) measurement comparisons for all EA metrics would be a good indicator of EA program penetration across the organization. The status of EA Metrics is presented and communicated to the relevant stakeholders at regular intervals. The following diagram depicts the EA Metrics Measurement Framework. EA Metrics Measurement Framework The business strategy of the organization is the preliminary input to the EA metrics model consisting of EA Metrics inputs and EA planning inputs. Use these inputs in all planning activities across the organization. Measuring the planning effectiveness and efficiency would clearly represent the value of EA to business, as these planning activities affect all four aspects of the organization, i.e. customer, finance, growth and processes. Customer metrics: Focus is on increasing the business value using EA. It helps in improving the business process (quality, costs) efficiency through architecture initiatives. Also, improves the business and IT alignment. Financial metrics: It covers capital expense reduction through the prevention of non-standard, one-off solutions. It helps in enabling the organization to use the latest technologies and asset reuse. Promotes operational expense reduction in the form of supporiting rationalization to simplify the portfolios, which brings cost transparency to run IT. Growth metrics: Focus on collaboration, workforce effectiveness, learning and capability factors. Process metrics: Regulatory compliance and project architecture assurance are covered as part of this metric. It drives behaviors toward adopting relevant IT standards & complying with processes. Also, it helps in improving collaboration through stronger compliance with IT standards and processes. The Metrics types are: Short term: These metrics measure the progress of EA during the initial iterations of EA implementation. Long term: These metrics measure the efficiency and effectiveness of EA to ensure that the true value of EA is delivered to the business. Summary Establishing an Enterprise Architecture function helps organizations keep complexity and misalignment at bay. However, it is not inconceivable that Enterprise Architecture may itself fall prey to this complexity trap if it is not well defined, managed and maintained. Even if it is, it may be of little to no value to the organization if the well-defined artifacts are not in use by the organization or if the EA processes not adhered to. To ensure that Enterprise Architecture is progressing well and is adding value to the organization, there is a need to define metrics for measuring the progress and performance of EA. The EA metrics should measure the implementation of EA and be governed by the concept of EA maturity. EA metrics should be defined in terms of effectiveness, agility and alignment to business goals and strategies. Once EA architecture is properly implemented and business entities are engaged, it will improve the overall planning activities of the organization and not just IT. Industry: Dr. Gopala Krishna Behara Distinguished Member of Technical Staff and Lead Enterprise Architect at Wipro Technologies. He is a Certified Open Group TOGAF, AWS Solution Architect, IBM Cloud Solutions and serves as an Advisory Architect, Mentor on Enterprise Architecture, Next Generation Architectures, Application Portfolio Rationalization and Architecture Assurance initiatives, and continues to work as a Subject Matter Expert and Author. He has worked on multiple architecture transformation engagements in the USA, UK, Europe, Asia Pacific and Middle East Regions that presented a phased roadmap to transformation that maximized business value, while minimizing costs and risks. He has published white papers, blogs and articles in international journals in SOA, BPM, Open Source and Next Generation Technologies & the e-Governance space. Dr. Behara has also published books titled "Enterprise Architecture Practitioner Hand Book", "Next Generation Enterprise Reference Architecture for Connected Government" and "Microservices Practitioner Guide". He is the recipient of the EA Hall of Fame - Individual Leadership in EA Practice, Promotion and Professionalization Award, 13th Annual Enterprise Architecture Conference, Washington, D.C., USA. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. =============

#### **OUTSIDE IN**

----- Arcticle source ----- https://www.wipro.com/blogs/jennifer-morgan/ outside-in/ ---- About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Outside In March | 2020 This article was featured in WOOL. Last updated for Wipro.com on March 6, 2020. WOOL: Jennifer, congratulations on being named Co-CEO of SAP and we look forward to more great things! In your recent role as President of SAP's Cloud Business Group, how did you leverage the position to create critical business innovations? ENNIFER MORGAN Thank you - I'm very excited about the new role. As you may have seen, we recently acquired a company called Qualtrics, which is geared towards experience management. These days, we are all operating in an experience economy. If a company is unable to tap into and cater to customers at all levels, someone else quickly steps in to fill that (experience) gap. Companies like Uber and Lyft were born because of a gap between what service was available and what people wanted to receive. Several start-up led innovations are geared towards exploiting this experience gap, whether in a product or a service. Legacy companies are also integrating digital transformation by identifying and addressing this gap. We are really excited about this new category (experience management) because it's going to allow us to combine operational data with experience data (of your employee, consumer, supplier, etc.) and distil not just what is happening but why it is happening. And I think companies that can leverage this kind of data in a proactive way will have a competitive advantage. I see merit in taking the best of what we have in terms of operational system and software enterprise and combining it with experience management or X-data, as we like to call it, to create a new way of seeing and running a business. "Good corporate governance is about making sure that you are doing the right business in the right way. It's also about making sure that it is something not just talked about by a small group of people, but practiced ground up and that it becomes an ongoing process." WOOL: Acquisitions are strategic, but integration takes time. As a leader, how are you transitioning on a cultural level, what does your to-do list look like, what are you most focused on? IM Listening and understanding. I have just walked into a new role. My job is to step in and create an environment of trust and transparency so that people believe. If people don't want to tell you what they want, it is hard to understand what you need to fix, what you need to be doing, what you need to accelerate, what your opportunities for new ideas and innovation are. So establishing trust is critical. I'm also laser-focused on making sure that I'm getting up to speed quickly on the product and engineering side of the business. Obviously, I'm very familiar with the revenue side of the business and spend a lot of time with customers, but I want to ensure that I'm familiarizing myself with those other aspects of the business as well. One of the things I'm going to be doing - in addition to spending a lot of in-person time with these teams - is actually leveraging Qualtrics to understand the experiences that

our product and development teams are having across the business. I think this will help me have a better understanding of the challenges and opportunities ahead from a product perspective. And this, to me, is walking the talk on ensuring that we're understanding the "what" that comes from having great O-data and the "why" that comes from having great X-data and in this case, that means understanding the employee experience. It also ties into making sure everybody is heard, and it allows me and everyone else in the organization to have a much broader context. I think this aspect is important for all verticals of businesses and leaders in order for them to understand how products are perceived, have more empathy, collaborate better, and ultimately, think differently and more creatively. WOOL: Qualtrics is an \$8 billion acquisition. There is always pressure to quantify results, especially with such big-ticket investments. How best can you deliver short term results since building trust, identifying new areas of innovation and forging partnerships cannot keep pace with quarterly earnings? JM Obviously. Absolutely. Any company reporting quarterly results has the pressure to make sure that you are delivering on the short-term whilst creating sustainable growth for the long-term. And you have to balance both. I have worked on the revenue side of the business, so I am used to delivering every guarter. I embody that sense of urgency and balance, which is particularly useful because in a large company, there are multiple things going on and it is easy to lose focus. A big part of my job is to make sure that people stay focused. You have to show progress in the short term and evaluate whether you are getting where you need to be, whether you report earnings or not. For me, I think what is important right now is to keep bringing the voice of the customer to the development and operational teams. It's no secret that further strengthening that connection between the customer and the product and development teams will continue to bear fruit for us. And that means ensuring that we're soliciting customer insights and feedback along the entire innovation journey. "We are really excited about this new category (experience management) because it's going to allow us to combine operational data with experience data (of your employee, consumer, supplier, etc.) and distil not just what is happening but why it is happening. And I think companies that can leverage this kind of data in a proactive way will have a competitive advantage." WOOL: You emphasize trust and transparency, but is it particularly difficult when you have a global network of supply chain? How do you ensure good corporate governance? IM To be honest, I think it starts at the top. In a large company, you have to make sure that you set the terms at the top. Good corporate governance is about making sure that you are doing the right business in the right way. It's also about making sure that it is something not just talked about by a small group of people, but practiced ground up and that it becomes an ongoing process. One of the things I've learned along my journey is that people watch everything leaders do. People listen to leaders. They watch their every move and every word. They listen to the tone. So leaders have an obligation and responsibility of making sure their behaviour has a positive impact every single day, not just in significant events. We talk a lot about great leadership, integrity, morals, and how ethics builds trust. Words are one thing, but people need to see your actions. People need to see how you show up. When I started out, things were more scripted. There was a lot of formality around communication and how people spent time in the company. Today, we have the ability to connect with employees, customers and

partners in-person as well as through online campaigns and social media. People are intuitive. They can figure out when somebody is being inauthentic. Also, leaders should be willing to be more vulnerable. When I say vulnerable. I don't mean weak. I mean they should be open to learning and changing. This fosters followership. It fosters trust. WOOL: While we are speaking of leadership, you have been credited with bridging the pay gap at SAP. I am curious what it took to drive this scale of change, which is so rare? IM One of the biggest lessons I've learned as a leader is that sometimes the only way to see through uncertainty is to lean into it. Whenever a business looks at an issue like pay equity, there's an embedded element of uncertainty - you don't know what you're going to find and there's always a risk in that. A leader must take a stand on issues or topics that others remain nervous about. For me, closing the gender pay gap at SAP was part of my agenda of building a different type of culture than what existed and I was led by passion. I've always believed in building a culture of transparency, and embarking on this initiative meant answering the tough questions and identifying a positive path forward. We worked with a firm to examine pay levels for all our employees and took into account several factors such as experience, performance, and employee location. It was a critical moment for our company because we truly didn't know what the outcome would be. I had assumed that the inequity would be around women and it was more concentrated around women but surprisingly, 30% inequities also existed among male peers. That, to me, was eye-opening. "There's one thing that's really critical to being a good leader though, and that's wisdom. Wisdom comes from a combination of time and experience. So on the podcast (A Call to Lead), one of the things that I really wanted to do was bring in leaders from diverse backgrounds to provide their wisdom and share their experiences in an authentic way, so that their triumphs, trials and mistakes become a learning, an inflection point for younger leaders." WOOL: Is it tough to mould yourself and step into the shoes of a start-up firm ever so often because while SAP is a legacy company, you are constantly providing solutions for small and medium firms and their culture? Their budgets are very different. JM WOOL: At the moment, which are the industries most prime for disruption? Where do you see an obvious experience gap? IM We're seeing disruption across every industry - no industry is immune. But that, for SAP, is exciting. And the reason is that one of SAP's core strengths has always been our deep industry knowledge and expertise. That's often what has set us apart, and that means our customers are looking to us to help guide them as they confront disruption and competition from both inside and outside of their industry. Another area of interest is regulated industries and governments. Popular opinion might look at government as a laggard in terms of innovation and the shift to the cloud, but we're seeing some interesting trends from our government customers. Whether it's state, local, or federal, they're thinking hard about how to connect with their citizens - and actually starting to model how a B2C customer would think about how to connect to a consumer. We also see interesting partnerships forming. I mean, today, every company, in a sense, is a technology company and that's evident when you look at the talent they're looking for and some of the digital business verticals they are creating. So the scope of technology is expanding far beyond supporting business functions - it's driving the business. "An outside-in approach is critical, especially when you are a large company. Large companies can

become insular, so it is important to always be in tune with your customers, your partners and your employees." In an interview you said that you evolved into the leader that you are because you didn't take decisions based on temporary difficulties. Can you elaborate on how this has played out in your life? JM Yes, sure. Sometimes, life lessons become visible to you in hindsight. When you look back, you realize how pivotal a moment it was. An example of such a moment for me was when both my husband and I had successful careers and we had our first child. When it was time for me to go back to work, we didn't really have a plan around the daycare situation. At this time, my husband had the opportunity to take a sabbatical. It was early 2002 and the dotcom bubble had just burst and the consulting firm he was working at sent out a memo to all employees, saying it was offering six to twelve months sabbatical, with a certain percentage of pay and benefits. It was a way for the company to retain talent. When he told me about this, I knew that it was going to provide our family a perfect solution, but he was not ready to be a stay-at-home dad. And of course, I didn't want to push him, because I wanted it to be his decision. He came around eventually and it really worked out for us. We had another child, he created his own life through volunteering and coaching. But looking back, if somebody had said to us at the time that we were making the decision for the rest of our adult lives, we would have probably not taken the decision at all. But because it felt temporary, it was easy. And it led us to a completely different track. When you have a problem, you tend to think that the next decision you take will affect your life for the next 10 years. So I always say if you're going through a time of hardship or you're in the middle of immense change in your life, don't take a decision that feels permanent. I wanted to talk to you about A Call to Lead, the podcast you host in the midst of everything else that you do. How did that come about and what did you want to address through it? JM I'm very passionate about the podcast. On a regular basis, I'm very fortunate that I can meet and spend time with so many different customers and leaders - all of whom come from different companies and backgrounds. If I think about what is so different today from when I was starting my career, it's this - today, people are going to be in positions of impact and leadership much earlier than I was; the next person who sits in my seat will likely be 10 years younger. The world is changing so fast. There's one thing that's really critical to being a good leader though, and that's wisdom. Wisdom comes from a combination of time and experience. So on the podcast (A Call to Lead), one of the things that I really wanted to do was bring in leaders from diverse backgrounds to provide their wisdom and share their experiences in an authentic way, so that their triumphs, trials and mistakes become a learning, an inflection point for younger leaders. Industry: Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to reexamine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/rachel-higham/ ---- Contact Wipro Blogs By Author New Frontiers Please fill the required details to access the content Rachel

#### **NEW FRONTIERS**

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value and more interesting work, leveraging their skills and delivering better customer outcomes. "I don't like the term unconscious bias whenever we have run training to combat it, there has been zero impact on behaviors. If anything, it has driven behaviors underground and they have become more nuanced, harder to call out and harder to solve for." - Rachel Higham WOOL: Rachel, the role of the CIO has shifted along with the focus to digital. For someone who has been at the center of this transformation, how has the experience been? How has the role evolved and what new skills have you adopted? RH Most organizations that are leveraging technology well are moving their CIO to report directly to the CEO. CIOs have a place at the executive table now. Most products and services have a technology component now so CIOs don't just set technology strategy. CIOs are now expected to be thought leaders and nspiring communicators. They are no longer experts in networking or application development - rather generalists, understanding the potential impact and opportunity from technology advancements. They must scan the external mar - ket to bring in an outside perspective - how an organization's products and services should evolve, where new revenue streams and opportunities exist, where threats exist. That's a huge challenge for CIOs because they have to change their network of contacts, forge new cross-disciplinary partner - ships, encourage their teams to get out there, meet people and go to different conferences. WOOL: It's not just CIOs - several traditional roles now have different demands. Do you think we are educating students to meet the evolving industry demands or is there a gap? RH I think schools are struggling to keep up with the skills, mindsets and behaviors we need in young people joining our organizations. I think it's down to companies like ours to lean in. At BT, our volunteering effort is about building tech literacy and digital skills. We go to primary schools and help teachers better teach computer curriculums. We go to secondary schools and try to excite children to select STEM subjects and understand how technology plays a role in all industries. We put role models in front of students, talk to them about possible career journeys and share inspiring stories of the difference we can make by choosing STEM careers. When I was young, we took clocks apart; I helped my dad fix our washing machine, VCR and car. You can't do that with an iPhone, you need a specialist for that. You can't explore the internal workings within the technology we con sume today, which means we can't use that to inspire children to be curious and ask questions. So industry leaders need to step in and build the excitement around subjects. WOOL: It's quite a paradox - on one hand, there is a talent crunch, and on the other, there is almost an exodus when it comes to women (in tech companies) dropping out of the workforce. RH It is, but there are actually two different problems to solve around women in the workforce, depending on which geography you are in. In the UK and other western economies, the biggest problem is the lack of girls choosing STEM subjects, either in high school or as they go to university. Around 12% of computer science graduates in the UK are female, so we aren't building a diverse talent pipeline. When we do get them into organizations, we aren't seeing them progress as fast as their male colleagues. At BT we did deep research on why this was happening and found that a lack of confidence was a major cause. So we are doing something structurally in our organizations that erodes the confidence of women. In India, we have great gender diversity on the intake, nearly 50% are women! But once they have children or shoulder the responsibility of

looking after their parents, they drop out, feeling they can't balance their career and personal responsibilities. In response, we have a program that identifies role models from our own organization, who have achieved that balance, and have them share their stories. We also run a return to work program that engages with women who dropped out and brings them up to speed with changes that might help them should they decide to re-join the workforce. "When I was young, we took clocks apart; I helped my dad fix our washing machine, VCR and car. You can't do that with an iPhone, you need a specialist for that. You can't explore the internal workings within the technology we consume today, which means we can't use that to inspire children to be curious and ask questions." - Rachel Higham WOOL: While these efforts are internally focused, I read that investors prefer entrepreneurial pitchesfrom men 50% more than from women. How can one deal with such jarring unconscious bias? RH There's a lot of research to show that women entrepreneurs are funded less; they have access to less than a tenth of the funding male entrepreneurs receive. I don't like the term run training to combat it, there has been zero impact on behaviors. If anything, it has driven behaviors underground and they have become more nuanced, harder to call out and harder to solve for. Frankly, I don't think these behaviors are unconscious; they are overtly conscious - a result of social, cultural and religious conditioning. Labels excuse them. We should call out inherent biases and solve for them, not apply labels and give them an excuse, have some training courses and believe it will change such deeprooted behaviors. WOOL BYTES WITH RACHEL HIGHAM What is your one artificial intelligence driven fantasy? That it will help us solve global health issues. What is the best part of being CIO? Each day is so different; the pace of change is energizing. What quality do you most admire in a boss? An inspiring communicator. What's the first word that pops into your head when I say future of work? Purposeful spending less time in meetings and moving around information and more time making an impact for our employees, customers and society. You are a technologist. How do you unwind? I get outdoors, go mountain biking, hiking, skiing and kayaking and never take my phone with me. What's your favorite phone application? TED. Recommend a book The Athena Doctrine by Michael D'Antonia and John Gerzma. A quote that motivates you "Twenty years from now you will be more disappointed by the things you didn't do than by the ones you did, so throw off the bowlines. Sail away from the safe harbor. Catch the trade winds in your sails. Explore. Dream. Discover." - Mark Twain. Your top tips for someone suffering from stage fright 1. Think of your speech as a story you're telling. The audience won't notice a mistake because they don't know the story! 2. Get out of your head, focus on the physical - pause, breathe, balance over your feet, open your shoulders and smile at the audience. Purposeful spending less time in meetings and moving around information and more time making an impact for our employees, customers and society. Your recommended TED talk? Mileha Soneji's fabulous talk on Simple Hacks for Life with Parkinson's. Industry: 5G is an ecosystem play where multiple technologies When multiple perspectives shape how an organization handles change, greater opportunities for success are in reach. Get the details at our blog. New technologies like 5G, plus constantly Arcticle source ---- https://www.wipro.com/blogs/sujith-nair/ ---- Contact Wipro Blogs By Author The New Era of Autonomous Systems Please fill the

required details to access the content Sujith Nair Sujith Nair Heads GTM globally for Autonomous, Electrification and Robotics in Wipro's Industrial and Engineering Services Has been working for Wipro for close to 15 years and has extensive experience in the Automotive domain. He is currently heading GTM globally for Autonomous, Electrification and Robotics in Wipro's Industrial and Engineering Services. For more information, contact him at sujith.nair2@wipro.com Ever since the first programming language was written, software technology has played a crucial role in transforming the efficiency of machines, processes, and people. Today, as software technology drives drastic improvements in outcomes and operations, we are on the cusp of a new and exciting chapter in its narrative.

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### The New Era of Autonomous Systems

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and exit.1 The fact that thirteen Amazon Go stores have come up within a year of the first store is testament to how well autonomous stores resonate with shoppers. 2 However, the technology that creates such futuristic functionality comes with a heavy price tag. Yes, the first Amazon Go store's hardware cost a whopping \$1 million to set up.3 It is where retail brands can face a challenge. With small margins and high investments, next-gen autonomous stores, although trendy, might not be easy to roll out. Also, while these stores do not have cashiers, they will still need employees who must be able to fix issues with the software and hardware used to construct these stores. While the front-end of the retail store is becoming autonomous, there are also great improvements to the entire fulfilment process. The convergence of robots, sensors, motion planning, computer vision and AI has resulted in fully autonomous warehouses. The entire process of tracking orders, putting goods into packages, labeling them correctly, and sending them to the right terminal for delivery has been automated. 4 The next use case for autonomous vehicles is the last-mile delivery. After successfully delivering packages to Seattle's neighborhood, Amazon Scout is now being introduced to Irvine in California. These battery-operated autonomous vehicles are helping the e-commerce giant deliver packages from warehouses to customer's doorsteps with amazing accuracy. As of now, they can navigate obstacles such as trash cans, skateboards, and lawn chairs, and efforts are on to make them capable of climbing steps as well. 10 If you order a Domino's pizza in Houston, the chances are that they might be delivered in an autonomous vehicle. By partnering with a self-driving car technology company called Nuro, Domino's hopes to improve last-mile delivery with the next-gen autonomous vehicles. Similarly, Ford and Domino's Pizza partner for delivering pizza in Ann Arbor Michigan leveraging self-driving cars. Lastmile delivery to China's remote villages is now being made seamless and faster with drones. 5 The Chinese retail giant ID.com is one of the pioneers in making warehouses and last-mile delivery fully autonomous. Within a couple of years, we will see many more retail companies following this model. The flip side of being a pioneer is that you are exposed to new risks, and the learning curve is steep. Venturing into the unknown territory of autonomy requires comprehensive monitoring to prevent hazards like the one that impacted the UK retail brand Ocado. As one of the first to automate warehouses in Europe, Ocado was in for a rude shock when the heat generated from its robotic setup caused a devastating fire at its autonomous warehouse. It took days to extinguish and resulted in the evacuation of neighboring residences and factories.6 These are just some of the fantastic use cases of making systems autonomous in the world around us. Giving lifeless objects the eyes to see, ears to listen, and a brain to process information is now possible with advancements in software technology. Enterprise leaders need to accurately estimate effort and cost investments before beginning on a project and must be prepared to tackle unexpected issues as they progress. They must also have a clear understanding of the distinction between making objects autonomous versus making them automatic. As we progress into this new realm of autonomy, not only for individuals but also for inanimate things, I see great potential for intelligent objects to support humans further in our evolution. References 1https:// www.youtube.com/watch?v=g7 7lH7S1Ew 2https://www.forbes.com/sites/ andriacheng/2019/06/26/amazon-gos-even-bigger-rollout-is-not-a-matter-ofif-but-when/#6bdddd3c6f52 3 https://www.forbes.com/sites/andriacheng/

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Vijay has been in the software industry for more than 2 decades and the
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about autonomous systems and robotics, and currently leads business
development of autonomous systems in Wipro's Industrial and Engineering
Services. For more information, contact him
at vijayendra.agrawal@wipro.com To harness the full potential of connected
devices, enterprises need comprehensive IoT solutions that empower the
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order management system with Oracle ERP

# A single system for super-efficient sales and service order management

----- Arcticle source ----- https://www.wipro.com/blogs/swetha-chinta/a-singlesystem-for-super-efficient-sales-and-service-order-management/ ----- About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content A single system for super-efficient sales and service order management March | 2020 Persuading customers to make a purchase is half the battle won. Today, selling skills are being focused toward reaping the true profit potential of products by bundling them with services. For example, smartphone manufacturers want to bundle their devices with music subscriptions and advanced photo editors; packaged database software vendors want to combine their products with consulting, management, security and customization services; hair care companies want to sell long-term salon services. Pairing products with services is becoming the norm, especially for trusted brands. The problem is that customers are demanding extreme flexibility while doing so. They have begun to opt for providers who are able to customize payments for services at the time of buying the product. This can be a challenge. Traditionally, organizations have used an order management process to sell products that generates one invoice or bill. Then, switching to another process, they re-enter customer and purchase details for services, subscriptions, warranties, etc., which involve a contract or agreement. For this, a second invoice or bill is generated. In essence, there are two types of billing, two back-end systems, two separate teams involved, and two separate bills—while the customer wants a seamless buying experience. Today's order management systems need to be flexible. They should be able to combine products with services and cater to customers who want free trial periods, annual payment options, quarterly, monthly and even pay-as-you-go options. The systems should allow customers to move smoothly from an initial free, daily or monthly subscription/payment to a quarterly or annual one. The need is for a system that permits these permutations and combinations, providing the customer, the organization and its agents with one UI experience while the sales and service data gets distributed at the back end to different teams. Oracle R12.2.2 ERP solves this problem. Unlike previous versions, R12.2.2 is a robust platform with one Order Management (OM) module that can generate an invoice for the product and the entire duration of a service/ subscription contract in any permutation or combination. It does this by presenting two tabs to users - one for Sales Orders and the other for Service Contracts - that are linked. Between them, the new options allow: Wipro has implemented R12.2.2 for a variety of customers, from manufacturing to defense companies. Existing contracts have been migrated to the new

system, templates have been populated with data and data has been tested. Now, these customers completely avoid entering the same data twice (for product and service), they have gained access to flexible service options that customers want and are able to generate a single invoice efficiently. This is the future of Order Management. Anything less will be inadequate, forcing end buyers to look for more convenient options. Industry: Swetha Chinta Oracle Apps Techno Functional consultant, Oracle Service Line, Wipro Limited Swetha brings 12+ years of an experience in Implementing various modules in Finance, SCM and Manufacturing and is a certified Oracle Implementation professional in Oracle Cloud. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

### Migrating HCM Data to Oracle Cloud

---- Arcticle source ---- https://www.wipro.com/blogs/devesh-pandit/migrating-hcm-data-to-oracle-cloud/ ---- About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Migrating HCM Data to Oracle Cloud Are you converting the right data (and the right volume)? March | 2020 The success of cloud implementations hinges on the ability to convert and move data without compromising project schedules. There are decisions, such as "What data should I bring over?" and "How much data should I bring over?" that every organization must consider. The answers become critical for HCM data being migrated to Oracle Cloud and determine the value creation for Oracle HCM Cloud. What may seem like perfectly good data in the legacy application may not be a right fit for Oracle

HCM Cloud -- which is why it is important to understand the source as well as the target when migrating data. How do you gauge the complexity of your data? Some top-level indicators would be: It is easy to see that without a good migration strategy things can go awry. At the very outset, it must be understood that all data should not be migrated. This is in the interest of keeping the Cloud HCM application clean, validated and reliable as the single source of truth. A typical conversion strategy for HCM applications can be divided into two: Once these simpler steps are done, conversion takes center stage. Ideally, data conversion is split into six areas: If an organization decides on converting the full historical data, it should do a cost/benefit analysis at an early stage of the implementation (historical data is dirtier and therefore more costly to convert). Additionally, customers should review the process-wise flows in Fusion for the importance of historical data. Based on previous experiences with migrating legacy applications to Oracle HCM Cloud, Wipro recommends converting 1 to 3 years of legacy HCM data, however, this duration might vary depending on the legislative requirement of the country. For instance, Wipro recently helped a global healthcare & diagnostics services provider convert 3 years of historical data as part of a large HCM transformation program. One platform which simplifies the process of data migration is Wipro's QuMiC. QuMiC leverages automation to extract data from legacy systems like EBS and PeopleSoft, validate and report issues to business, and finally perform data transformation required for compatibility with Oracle HCM Cloud. QuMiC accelerates data conversion by 30-40% by eliminating multiple manual and redundant steps. With QuMiC and the right strategy for migration of data to Oracle HCM Cloud, organizations can achieve faster time-to-market and maximize the value of their investment. Industry: Devesh Pandit Practice Head, Oracle HCM Cloud, Wipro Limited Devesh Pandit has over 15 years of experience in IT and leads Oracle HCM Cloud Practice at Wipro. Devesh has played various roles in Managing Delivery, Domain and Cloud Solutions. He has successfully led multiple large cloud transformation programs across industries and verticals. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

#### **Navigating Disruptions in HR**

---- Arcticle source ---- https://www.wipro.com/blogs/devesh-pandit/ navigating-disruptions-in-hr/ ---- About the Authors Contact Wipro Please fill the required details to access the content Navigating Disruptions in HR May | 2020 As COVID-19 continues to create a climate of uncertainty, organizations across the globe are struggling with an unprecedented crisis and most of them are still gearing up to handle the sudden impact to business. In this critical moment, HR must serve as a partner in anticipating change and plan for the future of the business. HR's primary focus should be to ensure the safety of employees and customers. It is also the right time for HR leaders to recalibrate their priorities, such as focusing on managing a newly remote workforce, digitalizing the HR function, and reimagining workforce models. Any new ways of working must enable employers to maintain employee productivity, comply with legislative changes introduced by various governments, and ultimately, protest the business's bottom line revenue by optimizing costs. What can organizations can do to handle some of these business challenges? When navigating these challenges, HR leaders can turn to IT for solutions. Oracle's Human Capital Management (HCM) Cloud offers a wide range of features designed to help organizations resolve HR issues by: These solutions help organizations ensure that impact of the pandemic is minimized-on their employees, productivity, day-to-day operations, and bottom-line. It helps businesses operate efficiently while retaining employees and providing them with the tools they need for healthcare and safety. Wipro has enabled the above-mentioned solutions with some of our customers in North America and the Middle East to address customer business challenges around the fast-changing HR landscape and newer ways of working. To navigate this pandemic some organizations may have to undergo a major cultural overhaul, which makes the objective even more difficult to achieve. However, the journey would be simplified with a vision for the future, a scalable solution and a partner that understands the legislative and organizational workforce policy changes required to enable HR teams to successfully navigate through these tough times. Devesh Pandit Practice Head, Oracle HCM Cloud, Wipro Limited Devesh Pandit has over 15 years of experience in IT and leads Oracle HCM Cloud Practice at Wipro. Devesh has played various roles in Managing Delivery, Domain and Cloud Solutions. He has successfully led multiple large cloud transformation programs across industries and verticals. Sunil Kumar Oracle HCM Solution Architect, Cloud Enterprise Platforms Practice Sunil brings 14+ years of experience in Oracle Applications HCM Consulting, Implementation, Upgrade and Product Development. He holds a Bachelor of Technology from Indian Institute of Technology, Roorkee.

## Telecom & Entertainment industry - The convergence

imperative

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information and entertainment on any device with instant internet connection -increasing mobility and flexibility of options. This creates the potential to offer and upgrade devices with new capability such as apps over OTT or simple app directly connected to a content creator. Newer assets, enhanced screens for devices, user experience in not only viewing content but simultaneously reaching out to the social media, and personalized advertisements are some of the aligned business opportunities. forward: Merge & survive In the end, the backbone or platform via which the programs are provided by the Telcos will be very relevant. It will be equally crucial to provide the right entertaining content suitable to subscribers in future. So either the Telcos should acquire or merge with MSOs, which we have seen with AT&T and DirecTV merger1. Verizon's FIOS2 is an example of how internet services was built for triple play similar to other operators. The merger option of "any to any" such as AT&T to Dish or Verizon to Dish can always crop up as the market is for sure going towards this direction. The AT&T and Time Warner3 merger is a signal and no entity in future can hold this trend. There are other potential options: Monetization: Both Telcos and MSOs can leverage data monetization for B2B and B2C customers. IoT: All the data interchange in the connected world, from cars to home to industries be it retail, shipping, airlines, mining, agriculture, is possible through telco backbone services. Security: Enhancing data and information security. Cloud provisioning: Telcos can diversify into Cloud hosting options with the likes of Amazon, Microsoft. Here, there are multiple opportunities and the potential to break the monopolies! The outlook In short, the telecom industry with the backbone and the content providers are to come together to create new avenues to generate revenues. With consolidation, many new opportunities will be created, helping the subscribers keep the cost low and get better services. With the advent of 5G, Telcos will approximately spend \$100B from 2020 to 2025 to upgrade their infrastructure, enhance NFV/SDN etc4. Advanced System Integrators and value-add partners will help with new edge technology transformation and merging of business across discrete platforms of Telcos and MSOs. Big Data, Cloud, Serverless Architecture, IoT, Security, Analytics and Data Science are some examples where the System Integrators can help achieve the goals faster. References 1. https:// finance.yahoo.com/news/67-billion-t-directy-merger-144655634.html 2. https://en.wikipedia.org/wiki/Verizon Fios 3. https://about.att.com/story/ att to acquire time warner.html 4. https://www.mckinsey.com/industries/ technology-media-and-telecommunications/our-insights/the-road-to-5g-theinevitable-growth-of-infrastructure-cost Industry: Subhrajyoti Ghosh Consulting partner in Wipro's Analytics Subhrajyoti Ghosh is a consulting partner in Wipro's Analytics Consulting Practice with 22 years of experience as a strategist and technologist in Information technology - specifically in Analytics & Artificial Intelligence in Telecom, Media & Entertainment, Cable & Digital Media, Manufacturing, Financial, Consumer and Government sectors. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless

processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force.

### Redefining the future of CPQ

----- Arcticle source ----- https://www.wipro.com/blogs/kiran-kulkarni/ redefining-the-future-of-cpg/ ----- About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Redefining the future of CPQ March | 2020 Digitalization is essential for organizational growth and this growth is majorly dependent upon business revenue in any industry. There are certain KPIs that help and facilitate revenue growth like Time to Market, Risk Reduction, Sales Cycle Time, Upsell & Cross Sell etc. The application architecture for both B2C and B2B customers must facilitate the identification, tracking, managing and analyzing patterns of these KPIs to control the revenue and then they can be aligned for growth. In terms of unavailability of such application architecture, it is arduous and time consuming to keep aligned such KPIs for growth. In recent times, modern digitalization methodologies have identified and nurtured CPQ products as a technological bridge in between any CRM and ERP systems. The reasons behind this CPQ bridge growth are: This list can be much longer but it illustrates the point about existence and growth of CPQ. As it has been repeatedly mentioned by respected business users and clients that CPQ is not just a sales tool that provides the data entry screen for sales people but it's a solid structure & platform for entire business transformation. Business transformation must focus on various business models to be initiated like "offerings-as-a-service", "on demand economy", "Subscription economy" and involvement of different engagement models like digital commerce, omnichannel, mobile and conversational too. These business and engagement models take the business transformation to a superior level with nonarduous outcome of predictive analysis, personalization and especially two modern terms being bandied around these days - Artificial intelligence (AI) and as well as the industry favorite - Internet of Things (IoT). CPQ works as a catalyst in such business transformations. In fact, not only as a catalyst but it works as the main ingredient with definite outcomes like: CPQ focuses on Customer experience (Cx), Performance and Intelligence to drive various

outcomes depicted above and also bridges the gap between any kind of CRM and ERP products in a structured E2E application platform. The future of CPQ is envisioned in various enhancements: Industry: Kiran Kulkarni Practice Head, Apttus and Zuora Practice, Wipro Limited Kiran currently works as Apttus and Zuora practice head at Wipro. He has 18+ years of experience in CRM and Apttus products on various technologies along with Telecommunications, Healthcare, Manufacturing and High-tech domain experience. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to reexamine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/monish-chopra/ ----- Contact Wipro Blogs By Author How digital intervention can help during pandemics Please fill the required details to access the content Monish Chopra Monish Chopra Senior Manager, Healthcare - ANZ, Wipro During his 30+ years in Business Management and IT, Monish has established and grown new lines of business for multiple organizations. He is an experienced strategist and architect, utilizing Lean, Six Sigma, ITIL, TOGAF and COBIT tools to create and execute transformation programs for clients. Monish has deep understanding of the Healthcare domain, having worked across Pharmaceuticals, Medical devices, Payers and Providers. We live in uncertain times where natural disasters and unpredictable events are on the rise. From fires to floods to volcanic eruptions and draughts, 2020 has been a relentless year, demanding extraordinary mitigation interventions from our

# How digital intervention can help during pandemics

----- Arcticle source ----- https://www.wipro.com/blogs/monish-chopra/how-digital-interventions-can-help-during-pandemics/ ----- About the Author Contact Wipro Related Blogs Metaverse: Business Implications, Monetization Models and Adoption Challenges How blockchain can hack-proof a supply chain Agility is Hard Because Its Soft Please fill the required details to access the content How digital intervention can help during pandemics March | 2020 We live in uncertain times where natural disasters and unpredictable events are on the rise. From fires to floods to volcanic eruptions and draughts, 2020 has been a relentless year, demanding extraordinary mitigation interventions from our end. And now, we are dealing with the COVID-19 pandemic crisis. This rapidly spreading virus has brought countries to a halt, putting entire cities under quarantine and killing thousands across the globe. As information (and misinformation) spreads, we see rising panic, and healthcare infrastructures crumbling under the

unexpected burden. Digital technologies can play a vital role in helping manage the situation. However, given that there are no ready solutions at hand, companies in the healthcare space - payers, providers etc. need to make quick decisions and move fast on deployment. Let's take a look at some of the areas technology can impact: Wellness and prevention interventions Businesses must come forward in this time of need and help people deal with the turbulent times. Insurance companies especially can take wellness interventions to the population by creating COVID specific apps or portals or opening access to COVID related information on their existing digital assets. Timely and validated information delivered via trusted sources i.e. insurers and Department of Health (DoH) could help prevent the spread of the disease. These apps or webpages could also share important tips on exercise and nutrition and how to manage anxiety and stress during lockdown. For instance, Wipro has developed an Intelligent Conversation Robot (Corona Bot) on our Venture company Avaamo's AI platform to provide timely information on COVID 19. This bot is available not just to our customers, but also to the general population as a public service. Diagnosis and triage of cases Given the recent emergence of the disease and its rapid spread, there are not enough COVID testing kits available. A quick self-assessment based on the DoH checklist, made available via apps or websites could help people self-diagnose and seek help if needed. Based on the results of this assessment, physicians could book appointments on priority for those people who seem most at risk or show severe symptoms. If these cases are pre-identified, physicians can also separate them from regular patients at their clinic and minimize chances of contamination. Quarantine adherence Once a person is diagnosed with COVID, it's important to know their whereabouts in the recent past. Using location data from a person's phone can pinpoint the general areas that they might have infected unknowingly. This helps government agencies take appropriate action in compromised locations. Technology can also help those in charge keep track of people under home quarantine. This could be done with spot checks using automated tools and asking people to hop on a video call or take a photo in their house with a time stamp etc. Hospice care The hospital infrastructure is groaning under the new demands placed by the Coronavirus pandemic. Hospitals are repurposing wards, physicians, nurses for "pandemic response", moving them away from sub-acute or non-timecritical health issues. To appropriately assign these resources, healthcare facilities need analytics-based dashboards that could provide quick understanding of resource availability. Analytics would also help us understand this disease better. Already, organizations across the globe are collecting COVID patient data. Propensity and morbidity analysis would help us understand who is more susceptible to this disease and who can recover from it. Pandemic modeling is also going to help glean critical insights on population health and transmission rates. In addition, telehealth technologies could help reduce health workers' strain and exposure. The time to act is now In Australia, the number of cases is rising exponentially. As on 20th March there were over 700 confirmed cases. Source: https:// www.health.gov.au/news/health-alerts/novel-coronavirus-2019-ncov-healthalert/coronavirus-covid-19-current-situation-and-case-numbers Timing is of essence. May, June, and July months are the peak flu season for Australia and New Zealand and we need to act before we hit that timeline! Given how fast the disease is spreading, there is no scope to work with traditional

timelines of new technology deployment. Developed the routine way, an app would take weeks to go live - valuable time that could mean lives lost! At Wipro, we are accelerating time to market of these technology lifesavers via our crowdsourcing platform Topcoder - bringing together brilliant minds from the world over to compress development time to a matter of days. Write to us at monish.chopra@wipro.com and let's talk about how we can together stop the spread of COVID-19. Industry: Monish Chopra Senior Manager, Healthcare - ANZ, Wipro During his 30+ years in Business Management and IT, Monish has established and grown new lines of business for multiple organizations. He is an experienced strategist and architect, utilizing Lean, Six Sigma, ITIL, TOGAF and COBIT tools to create and execute transformation programs for clients. Monish has deep understanding of the Healthcare domain, having worked across Pharmaceuticals, Medical devices, Payers and Providers. The Metaverse is collapsing the physical and virtual worlds to create a paradigm shift in interactions between customers, suppliers, partners, employers and employees. It's every company's worst nightmare. In 2019, a global metals manufacturer experienced a ransom-ware attack in which hackers seized and encrypted its computer files, then demanded payment to unlock them. Agility as a concept has been discussed for years, though the competitive advantage of being more agile came into sharp focus in 2020. The increased pace of change, rapidly evolving customer needs, compressed timeframes for responding — all of these and more drove the topic back onto every https://www.wipro.com/blogs/nicole-sholly/ ----- Contact Wipro Blogs By Author 10 Tips for Remote Workers Avoiding the Coronavirus Please fill the required details to access the content Nicole Sholly Nicole Sholly Wordsmith for Rackspace, Office Depot, Macy's, Social Media Today, and others With two decades of writing, editing, and author coaching experience, Nicole has written on topics ranging from big data security to improving employee workspaces to how to be a better wordsmith -- for Rackspace, Office Depot, Macy's, Social Media Today, and others. When she's not writing, editing, or otherwise playing with words, Nicole enjoys reading them. In our increasingly digitally connected world, many of us are able to work at any time, from anywhere, including the neighborhood coffee shop or our own www.wipro.com/blogs/nicole-sholly/10-tips-for-remote-workers-avoiding-thecoronavirus/ ---- About the Author Contact Wipro Please fill the required details to access the content 10 Tips for Remote Workers Avoiding the Coronavirus March | 2020 In our increasingly digitally connected world, many of us are able to work at any time, from anywhere, including the neighborhood coffee shop or our own home. For many people, working at home is a dream, but it's not for everyone. And even if you've always wanted to do it, you probably wanted adequate time to prepare for it, so you can get as much work done at home (if not more) as you do at the office. Public health officials continue to provide updates on the coronavirus and how to keep ourselves healthy, while some schools and other institutions have shut down or canceled events to help prevent the disease from spreading. You might find yourself working remotely sooner rather than later, which you may not feel totally prepared for. To help you stay organized and productive, we've put together this list of tips to help you maximize your work at home time. Stick to your normal routine If you generally get to the office at 8 a.m.,

then plan to start work at home at 8 a.m. Doing so will allow you to have your morning routine, which to many of us is essential to starting the day right. Don't succumb to pressure you might feel to start work earlier, at 7 say. You can if you want to, of course, but you shouldn't necessarily feel obligated to do that. By the same token, don't get lax and not start until 10:30. Whatever your reason for working at home, you should make yourself available to clients and coworkers the same way you would if you were at the office. If you're used to showering and putting on a work outfit, do that every morning you plan to work at home if that's what it takes to make you feel ready to take on the day. Of course, you might have a day when you wake up feeling on the brink of illness, in which case no one would blame you if you checked email in your pajamas and got back into bed for additional much-needed rest. Stick to your to-do list Your work priorities likely won't shift just because you're doing the work someplace other than in the office. Just as you adhere to your personal morning routine, you'll want to start your workday by consulting your existing to-do list or creating one for that day. Work your way through the list, completing the critical tasks before moving to less urgent ones. If you check off everything on today's list before your workday is done, see what you can get started on for tomorrow's list. Efficiency is key, and you never know what tomorrow might bring. Working ahead just might save you future stress. Remember to take breaks Just as you take breaks when you're in the office, stepping away from the desk or computer at home can help keep you focused. Sometimes, when you're stuck on a problem, having a few minutes away -- or an hour for lunch -- is just what you need to hit on a solution. When you return to the problem, you'll do so with a refreshed mind. Have a designated workspace Ideally, your designated work area will not be the coffee table or the kitchen breakfast nook. If that's the only space available to you, however, just make sure all members of the household understand that's your office and to give you privacy when you're sitting there and working. Outfit your space with useful office supplies Although you might find yourself in a situation where you're starting a work at home program without significant time to prepare for it, a few supplies can make life easier: Communicate with your family members, roommates, and anyone else living with you You might not be the only adult in the household in an emergency work at home situation. If your partner or roommate(s) will all be working, let each other know what your work schedules are like. If space is at a premium, you might need to share. That could get complicated if everyone has work-related calls, so having a schedule where everyone can get the privacy they need will help ensure everyone hits their deadlines and doesn't miss a meeting. If you have kids, you and your partner might need to tag-team caring for them and getting your work done. Figure that out ahead of time to keep them busy and to hopefully lessen your stress. Got kids? Keep them busy with activities If you're working from home, your kids might very well be home from school, too. If they're having elearning days, as some schools have experienced, be sure you know how to log in and use the necessary tools -- and what to do if you have trouble accessing anything. Otherwise, make sure the kids have other activities besides homework to keep them occupied -- like drawing, coloring, doing puzzles, playing games, or even watching a movie or show. Make a list of logins Check that you have the cell numbers and email addresses for anyone you'll need to be in touch with--including coworkers, clients, vendors, teachers, school administrators--and that they have yours.

Yes, you likely already have this list, from when you had to have a plumber to your house or work at home with a sick kid, but it doesn't hurt to check again. Also double-check that you have all the necessary login and password information you need to access your work files and your kids' school information. Finally, if you can't access your work email or other files, do you know how to submit an IT ticket? Or who to contact otherwise? Stock up on the essentials As you've no doubt read in many other places, having two weeks' worth of essential items on hand will ensure you have what you need if you aren't able to leave your house. Stock up on foodstuffs, medication (prescription and over the counter), paper goods like toilet paper and paper towels, hand soap, and activities for the whole family, like puzzles and games. Click here for a nice overview of what you will and won't need. Take care of yourself We hope you and yours stay healthy. You've heard it all before, but here's the drill: More and more companies are embarking on digital transformation journeys to continue to evolve with the world's changes. Having employees successfully (or not) work remotely can help businesses uncover areas where they're strong in business communications and emergency situations — and also where they can improve. Digital transformation is an ongoing endeavor. It requires a long-term vision for communication and change management as much as a focus on the technology to future proof your business. Want to learn more about digital transformation? Let's talk. Nicole Sholly Wordsmith for Rackspace, Office Depot, Macy's, Social Media Today, and others With two decades of writing, editing, and author coaching experience, Nicole has written on topics ranging from big data security to improving employee workspaces to how to be a better wordsmith -- for Rackspace, Office Depot, Macy's, Social Media Today, and others. When she's not writing, editing, or otherwise playing with Arcticle source ----- https://www.wipro.com/blogs/smitha-kumaran/ -----Contact Wipro Blogs By Author Crowdsourcing: Workforce Flexibility at Scale Please fill the required details to access the content Smitha Kumaran Smitha Kumaran Crowdsourcing lead at Wipro Smitha has 23 years of experience covering delivery, pre-sales, competency building, innovation and change management. For the last four years, she has led Wipro's Top Gear program, creating a pull factor for employees to pick up and learn new skills, and gain hands-on experience. Smitha works closely with Topcoder, and has been instrumental in evangelizing crowdsourcing as a new delivery paradigm. She is passionate about high performance, innovation, skillbuilding and workplace diversity. Crowdsourcing is not a new concept, but until recently it was known mostly for raising money or helping the most ----- Arcticle source ----- https://www.wipro.com/blogs/smitha-kumaran/ crowdsourcing-workforce-flexibility-at-scale/ ----- About the Author Contact Wipro Please fill the required details to access the content Crowdsourcing: Workforce Flexibility at Scale March | 2020 Crowdsourcing is not a new concept, but until recently it was known mostly for raising money or helping the most tech-savvy groups solve technical issues. Now, businesses at all stages of digital maturity are exploring the crowd and finding it instrumental to growing and staying flexible. Flexibility makes it easier to adapt, and adaptability is essential—now more than ever. As the COVID-19 pandemic continues to spread uncertainty throughout the global economy, businesses are looking for ways to adapt their offerings and customer engagements to

guidelines for social distancing. Individuals are looking for ways to adapt to remote working, and make themselves available for opportunities. Crowdsourcing connects businesses and individuals, and provides the infrastructure through which they can engage each other. In this article, we'll explore how businesses leverage the crowd to build resilient, remote workforces, and why that's so promising for individuals. What is crowdsourcing? Crowdsourcing is posing a challenge or task to a group. The size of the group can change, so can the size of the challenge. What's important is the act of opening the floor. From an organizational perspective, crowdsourcing allows a business to offer work to a community of professionals—either internally (employees) or externally (independent workers). Engaging a larger pool of talent opens the door to many benefits: Diversity leads to fresh ideas and new approaches; more people means more minds, which means a greater chance of finding the best solution, rather than the best solution one person can come up with. Right now, the value of fresh ideas cannot be overstated. Businesses need innovative solutions to overcome disruptions in the marketplace. Crowdsourcing can help identify new paths forward and develop the tools needed to succeed. The crowdsourcing model has evolved tremendously. Early applications mostly generated ideas, like a more ambitious brainstorm. Now crowdsourcing helps deliver tangible solutions and enables projects to be executed in real time. There are two distinct models of crowdsourcing platforms, characterized by the delivery method they use: a distributed micro-task model and a contest-based model. Distributed micro-task model Sometimes tasks are broken down or atomized into smaller micro-tasks, which are then presented to the crowd, and members can select which micro-tasks they want to work on. Distributing work like this helps maintain the pace of a project by engaging as many people as the project needs. The tasks are generally small enough that individuals can be briefed quickly (if necessary at all) and turn work around relatively fast. A software company might atomize a project into several development, testing, and implementation steps, and then pose those tasks to the community, where members select and complete them without needing to be aware of details of the larger project. Contest-based model Challenges are posed to the crowd, and members "compete" by completing the challenge. Often, there isn't one winner but several—the top concepts for each challenge are recognized and rewarded. Consider a company needing an app designed. With a contestbased model, the challenge to create the app would be posed to the crowd, and the top designs, generally three to five, would be rewarded. The emphasis here is on delivering more options and greater quality to the customer while still being equitable to the talent and ensuring multiple freelancers are awarded for their efforts. These two models are not mutually exclusive. Ambitious projects often require atomization, followed by several contest-like challenges. An example is NASA's International Space Station Food Intake Tracker (ISS FIT) app, developed to track food intake of astronauts in space. From concept to production is a lot of work, so the project was broken up into multiple rounds of challenges. With so much uncertainty right now, speed and innovation are the winning combination. Businesses need all the help they can get to shift focus and execute big changes strategically. Crowdsourcing connects them with a world of talent and supports them in doing big things fast. How can crowdsourcing supplement traditional staffing models? Expertise on demand Organizations

use a version of the distributed micro-task model to guickly engage a larger workforce remotely. With traditional staffing, a project is put on hold until the organization can find, interview, and hire the right candidate with the necessary skills. But crowdsourcing allows businesses to immediately connect with individuals (and vice versa) by breaking up functions of particular roles into manageable micro-tasks and broadcasting them to the crowd. Talent as a service Numerous online marketplaces connect members who are pitching their skills to businesses who are advertising freelance work. Organizations use these platforms to connect with top talent. Since the online marketplace allows organizations to draw from a deeper talent pool, the work is often higher quality, completed faster, and at lower cost. To be part of these online marketplaces, applicants must sometimes pass a screening process that includes professional communication skills, along with a variety of technical exams specific to the applicant's area of expertise. It's becoming increasingly common for businesses to use these marketplaces to find niche talent or assistance on short-term projects. Topcoder, the popular crowdsourcing platform, is a great example of talent as a service. Organizations engage Topcoder's global network of designers, developers, data scientists, to connect with hard-to-find talent and solve big challenges. For example, ConsenSys Diligence, the smart contract arm of the blockchain company ConsenSys, works in a very specific segment of an emerging technology, and finding people with the knowledge and skills to help them develop is challenging. But with the help of Topcoder, Diligence connected with individuals from around the world who have those niche skills, and formed a team of experts they can rely on to help with projects going forward. Taking crowdsourcing a step further With the help of Topcoder, Wipro developed an internal crowdsourcing platform for training, then later elaborated on that model to revolutionize talent resourcing internally and for enterprise clients. The platform helped build new lines of communication throughout our organization, and encouraged a culture of collaboration and cross-functional teams. Top Gear: A crowdsourcing training model Top Gear began as a learning platform. We first leveraged Topcoder's contest model of crowdsourcing to create an engaging, game-like approach to learning for our employees through fun, low-stakes competition: Wipro poses challenges to employees on Top Gear, and employees apply their skills to compete for prizes. Over time, we shifted to a more work-focused approach and began posing real challenges from live Wipro projects—crowdsourcing talent from within our own organization. The contest model allows employees to evaluate their skills against their peers, but the open, informal nature of the gamified training encourages communication and support. Why was the winning solution successful? How does it differ from other proposed solutions? Seasoned experts can help junior or novice participants answer these questions, creating a kind of organic, informal training that is the foundation for a culture of support and constant learning among employees going forward. We had an employee who worked primarily on Java projects and who was interested in developing himself. He wanted to learn Angular and Spring Boot. So, he started using Top Gear, completing small assignments to build his skills, then moved on to challenges and live projects that allowed him to put those skills to use. His first live attempts weren't so successful, but with feedback from mentors he increased the quality of his work. He submitted a winning solution. Then another, And another, Once only considering learning new languages, this developer is now being

recognized as a multi-challenge winner and competing in regional competitions. How does this apply to client projects? A project team came to us for help with a massive workforce transformation that involved everyone from manual testers to automation engineers. Our project team leveraged Top Gear to develop and implement a learning plan that up-skilled 80% of the account team, resulting in a 20% increase in productivity and a 14% improvement, year-over-year, for the department. In another instance, we worked with a project team in a platform migration, a process that required more than 2,000 stories to be automated and executed. Traditional approaches were falling short, so our project team turned to an internal crowd to source the talent they needed fast. By engaging Top Gear, the project team connected with a team of automation experts, who supported the existing team in analyzing user stories, Selenium testing scripts, and executing them. This crowdsourced team executed an additional 127 user stories over the course of eleven days, helping the account team clear the backlog and stay on schedule. Top Gear demonstrates how structured, internal crowdsourcing efforts can increase individual and organizational adaptability. Employees are supported in learning and applying skills to a range of projects. They share their expertise. They support each other in the pursuit of new opportunities. Hybrid Crowd: An evolution in enterprise staffing Hybrid Crowd elaborates on the success of Top Gear, providing a way for all enterprises (not just Wipro) to connect their internal talent teams with the more than 1.5 million members of Topcoder's global community. The platform integrates these talent pools, allowing enterprises to supplement their teams, on demand, with experts from the crowd. And because the platform screens all participants, organizations can be sure that intellectual property is protected, and they're only engaging individuals for projects who meet the necessary security and certification requirements. Through Hybrid Crowd, enterprises engage three crowds: private, certified, and public. In traditional staffing models, employees are recognized by the narrow skill sets for which they were hired. Designers design, writers write, coders code: Only the project-specific skills are utilized. The secondary skills of these individuals are completely ignored, which is problematic. To keep pace today, businesses need all hands—and skills—on deck. Hybrid Crowd acknowledges these broader skill sets by opening the floor to contributions from individuals who might have a working knowledge of a topic but aren't recognized as experts in the strict sense of the word. Workers self-select projects that fit their interests, expertise, and availability. Similar to Top Gear, Hybrid Crowd encourages flexibility and a higher quality of work by giving individuals more agency. In turn, workers are more invested in projects. They perform better, and employers come to recognize them and their skills, encouraging further innovations for the organization and opportunities for employee growth—a positive feedback loop promising a sustainable future of work. How can businesses integrate crowdsourcing successfully? Get informed, be supportive What skills are in demand in your industry, and which are immediately relevant to your business? The crowd might be self-motivated, but it needs some direction to be most effective. Work with employees, or assign mentors, to facilitate self-selecting projects and learning opportunities. Ease the organization into the idea of crowdsourcing, and guide them through the transformation. If your employees feel supported, they'll be encouraged to make the most of the freedom provided by crowdsourcing. Focus on quality How do you ensure

workers are qualified? This is one of the most prevalent crowdsourcing challenges, and it leads to a lot of wasted time and money. Some online marketplaces ask applicants to pass a screening process that covers professional communication skills and a variety of technical exams specific to the applicant's area of expertise. Topcoder tracks reliability and quality ratings for all participants. At Wipro, we create communities with these top participants to leverage them for particularly challenging or sensitive projects. Consider what skills are non-negotiable for a specific project and make these clear from the start. This will narrow the focus of crowdsourcing efforts and help you engage only qualified subsets of the crowd. Staff legally, sustainably, humanely As you begin to integrate crowdsourcing and other flexible staffing arrangements, consider the potential effects on the existing workforce and the individuals you will be engaging with through these platforms. The rise of the independent workforce (gig workers, freelancers, part-time employees) is leading to important reconsiderations of how workers are classified and how their rights are protected. It's essential that employers are familiar with these developments and work to ensure they're conducting business fairly and sustainably. Nurturing healthy, respectful business partnerships across these platforms will ensure that your organization has a reliable workforce, that your full-time employees get the support they need, and that everyone involved is taken care of. At Wipro, we adhere to contracts and prerequisites and ensure that all terms and conditions are met. We have crowdsourcing challenge architects and project managers who work together to ensure project tasks are broken down into pieces that can be managed without affecting normal workflows, and that individuals working on these tasks are compensated appropriately. We also ensure that our employees volunteer on their own and participate for their own interests. Tailor your approach Like all big innovations, crowdsourcing is disruptive. The question is whether that disruption will be positive or negative. Gradual implementation and constant recalibration will ensure positive disruption and support everyone involved for a successful transition. Before fully implementing crowdsourcing, consult an expert to identify the projects and skills suitable for this model of delivery and plan to scale up from there. Start crowdsourcing for small, less critical projects and adapt your approach as needed. As you get more comfortable, you can shift gears, start adding more people to this model, and leverage the crowd for mainstream challenges to drive revenue. Topcoder uses data analytics to examine and manage organizational structures, offering users a global view of where talent is coming from. The platform also tracks fulfillment rate, the percentage of challenges successfully closed on time. At Wipro, we measure the amount of effort that has been crowdsourced, the completion rate of crowdsourced tasks, and how many are completed on time. Now that we've been crowdsourcing successfully for some time, we have an organizationwide mandate to source a percentage of suitable projects through Top Gear. What's important when exploring crowdsourcing models is to remain open to adjusting your approach. Pay attention to the changing demands of your industry, your business, your workforce, and open the floor to creative solutions. To learn more about flexible staffing, and how to support a dynamic workforce, contact us. Smitha Kumaran Crowdsourcing lead at Wipro Smitha has 23 years of experience covering delivery, pre-sales, competency building, innovation and change management. For the last four years, she has led Wipro's Top Gear program, creating a pull factor for

employees to pick up and learn new skills, and gain hands-on experience. Smitha works closely with Topcoder, and has been instrumental in evangelizing crowdsourcing as a new delivery paradigm. She is passionate about high performance, innovation, skill-building and workplace diversity. www.wipro.com/blogs/andy-lamora/ ---- Contact Wipro Blogs By Author HARVARD AND TOPCODER SEEK TO DISRUPT CANCER DELINEATION, IMPACTING MILLIONS Please fill the required details to access the content Andy LaMora Andy LaMora Global Director, Data Science, Analytics & AI The Topcoder community tackled complex data analytic challenges before the term crowdsourcing was coined by Jeff Howe in 2006. www.wipro.com/blogs/andy-lamora/harvard-and-topcoder-seek-to-disruptcancer-delineation-impacting-millions/ ---- About the Author Contact Wipro Please fill the required details to access the content HARVARD AND TOPCODER SEEK TO DISRUPT CANCER DELINEATION, IMPACTING MILLIONS March | 2020 Read the official JAMA Oncology Research Paper The Topcoder community tackled complex data analytic challenges before the term crowdsourcing was coined by Jeff Howe in 2006. During those years, our community of data and computer scientists handled projects aimed at creating ground-breaking geospatial computer vision solutions, improving workplace safety through advanced algorithms, and even optimizing the energy capture for the International Space Station. these projects shared one common thread; they made use of our deep well of motivated and intelligent data scientists to tackle complex problems. The second leading cause of death in the United States is cancer. Among those cancers, lung cancer claims over 150,000 people's lives every single year. Recently, Topcoder joined forces with Harvard to tackle one of the most ambitious healthcare initiatives ever undertaken in the crowdsourcing world: creating and testing automatic delineation algorithms to help improve treatments of cancerous tumors in patients' lungs. THE HARVARD TUMOR HUNT: BACKGROUND Manual tumor delineation — the measure of treatment field borders of tumors — is a time-consuming and complicated process. Among other pain points, it introduces individual bias as well as person-to-person inconsistencies. For radiologists, tumor delineation continues to present a significant challenge to providing superior local control of radiation treatments. The Topcoder Harvard Tumor Hunt aimed to produce an automatic tumor delineation algorithm that met the accuracy of the average radiology expert but exceeded him or her in both processing speed and consistency. These three challenges led to the production of an algorithm that provides real, substantial tumor delineation results without individual bias and expert-to-expert inconsistencies. THE HARVARD TUMOR HUNT: IN ACTION The Harvard Tumor Hunt utilized our marathon challenges system. This system is a Topcoder staple used to work on complex problems best handled by technology. This marathon ran in three stages. In each of these stages, competitors wrote code, computed data, and submitted their results over a multi-week timeframe. Each piece of code and computed data received a score. From there, the scored submissions appeared on Topcoder's community leaderboard. THE HARVARD TUMOR HUNT: STAGE 1 + 2 The first stage of this marathon challenge involved producing an automatic delineation algorithm that was as accurate as experts in the field. During this stage, 31 competitors from various countries

(e.g., United States, Bulgaria, Poland, Brazil, etc.) participated in creating a real, actionable algorithmic solution that can be applied on a grand scale. In the second stage, 11 competitors worked to target the credibility of that algorithm by pairing it with expert feedback to train the algorithm to avoid mistakes that experts wouldn't make. A final, private challenge tasked five privately selected Topcoder members to incorporate final feedback from physicians and experts. The prize pool provided by Harvard — via Harvard Catalyst and the Laboratory for Innovation Science at Harvard — was \$50,000. The prize was split among contestants based upon final scores, which were representative of their work and solutions. THE HARVARD TUMOR HUNT: RESULTS In the end, the Harvard Tumor Hunt brought 31 of Topcoder's best and brightest data scientists together to create an actionable solution that could potentially save lives and breed superior practices for cancer treatment and identification. These cost-effective crowdsourcing competitions can help businesses, universities, and nonprofits garner tangible results that can make an impact on the world and people's lives. Cancerous tumor delineation is a critical part of the cancer treatment process. By accurately detecting the size and scope of cancerous tumors, radiologists can maximize the impact of treatment on cancerous cells and minimize its impact on noncancerous tissues — as well as accurately determine the correct treatment options for in-need patients. This challenge helped create an algorithm that was successful at rapidly delineating cancerous tumors. Better yet, it did so with the same level of skill as experts. TOPCODER AND HARVARD: CONTINUED SUCCESS The Harvard Tumor Hunt is one of many projects resulting from a partnership between Harvard and Topcoder. From computational biology to precision medicine, Harvard and Topcoder have created a standard of continuous progress and success in the fields of medicine, biology, and technology. Our partnership with Harvard's Crowd Innovation Lab has been the catalyst for some of crowdsourcing's most sophisticated and far-reaching successes. For more coverage discussing this crowdsource-powered breakthrough, visit these links: JAMA Oncology Research Paper: Use of Crowd Innovation to Develop an Artificial Intelligence-Based Solution for Radiation Therapy Targeting ZDNet Coverage: Researchers find crowdsourcing, AI go together in battle vs. lung cancer FierceHealthcare Coverage: Harvard, Dana-Farber AI challenge uses crowdsourcing to improve cancer care Becker's Healthcare Coverage: Harvard Business School: Open Innovation Contestants Build AI-Based Cancer Tool Boston Herald Podcast Boston Herald Feature Docwire News: Crowd Sourced AI Can Detect Cancer in Patients Fortune Magazine: Eve on A.I.— How to Fix Artificial Intelligence's Diversity Crisis Ready to solve your data science problem with Topcoder? Andy LaMora Global Director, Data Science, Analytics & AI www.wipro.com/blogs/sridhar-kumar-kannam/ ----- Contact Wipro Blogs By Author Optimizing ITAM/ITSM for an Australian Telco: A case study Please fill the required details to access the content Sridhar Kumar Kannam Sridhar Kumar Kannam Managing Consultant, Analytics & Artificial Intelligence Consulting Practice, Wipro Sridhar has 12 years of experience in data science and analytics across industries such as telecom, healthcare, manufacturing, mining and sports. He has a PhD in Computational Science from Swinburne University of Technology in Australia. Most large companies

have IT Asset Management (ITAM) and IT Service Management (ITSM)

### Optimizing ITAM/ITSM for an Australian Telco: A case study

----- Arcticle source ----- https://www.wipro.com/blogs/sridhar-kumar-kannam/ optimizing-itam-or-itsm-for-an-australian-telco-a-case-study/ ----- About the Author Contact Wipro Related Blogs AI Driving 5G Innovations for Communications Service Providers Making ML Models in Banking Resilient using Adversarial Attacks Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Please fill the required details to access the content Optimizing ITAM/ITSM for an Australian Telco: A case study March | 2020 Most large companies have IT Asset Management (ITAM) and IT Service Management (ITSM) systems that manage assets, which include not only hardware, software, networks and services, but also employee and customer data. In any enterprise, service desk managers and CIOs need insight from data for making key decisions. They can manage resources better, analyze costs and trends efficiently, and improve overall customer service quality by tracking critical metrics like employee performance, service desk responsiveness, IT user preferences, customer satisfaction ratings, service-level agreement violation rates etc. A leading Australian Telecommunications company, providing telecom, internet and digital services to individuals and large businesses, was facing issues with its ITAM/ITSM systems, leading to revenue loss and low customer satisfaction. The Telco was using its ITAM systems to manage its daily B2B operations and customer support. Despite having a very large ITAM/ITSM support team, the issues raised by the customers (such as network connectivity, purchase orders, applications down-time etc.) were taking several weeks, even months, to resolve. The need of the hour The telecom company wanted to improve the efficiency of their ITAM/ITSM systems, address the issues raised by their customers quickly and ensure high Customer Satisfaction Score (CSAT) through controlled operations. They also wanted answers to what-if scenarios such as The solution approach Post research, we understood that the Telco's service desk system involved very complex processes with violations of many business rules. We performed preliminary analysis of the historical data, the issues raised by the customers, and the tickets' lifetime and journey within the network. We came up with different solution approaches that were machine learning (ML) based and simulation-based, among others. The ML-based approaches considered were to predict the next best action to assign the tickets to the most appropriate group so that the tickets travel through the shortest path to get resolved quickly. The simulation-based approach mimicked the ITAM system and addressed what-if scenarios that the Telco wanted answers to. In simulations, we started with a question. Then we represented the system at a high-level abstraction, adequate to answer the question. We analyzed the raw data and extracted the input parameters such as arrival rate, service time distribution, resources distribution etc. for simulations, and then

performed the simulations. Post this, the output was analyzed to answer the questions. All possible configurations were simulated under the given business constraints to find optimal solutions. Technology used: The impact With the delivered solution, the telecom company was able to fix the issues with its ITAM/ITSM systems and ensure customer satisfaction. Benefits included: Key Learnings Best practices Final thoughts Simulation is a great approach to mimic a real-world scenario safely on a computer. They do not require big infrastructure: a couple of data scientists are enough to solve complex problems and a number of open source and free packages are available for simulations. Simulations require very low investment and the ROI is high. Surprisingly, despite its overwhelming usage, simulation has not got the attention it deserves. Industry: Sridhar Kumar Kannam Managing Consultant, Analytics & Artificial Intelligence Consulting Practice, Wipro Sridhar has 12 years of experience in data science and analytics across industries such as telecom, healthcare, manufacturing, mining and sports. He has a PhD in Computational Science from Swinburne University of Technology in Australia. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. www.wipro.com/blogs/amit-kothari/ ---- Contact Wipro Blogs By Author Cybersecurity Strategies for Adjusting to COVID-19 Please fill the required details to access the content Amit Kothari Amit Kothari Cybersecurity Evangelist and works as a Partner Alliance lead for the Asia-Pacific region Amit Kothari is a cybersecurity evangelist and works as a Partner Alliance lead for the Asia-Pacific region. With 14-plus years of cybersecurity experience, his previous roles include security operations center (SOC) analyst, security administrator, and cybersecurity architect. Amit has been instrumental in building cybersecurity strategies that reduce threats and enable clients to achieve their business objectives. Cybersecurity Best Practices - Preparedness for a secure remote workforce, compliance, and building a cyber-resilient environment www.wipro.com/blogs/amit-kothari/cybersecurity-strategies-for-adjusting-tocovid-19/ ---- About the Author Contact Wipro Please fill the required details to access the content Cybersecurity Strategies for Adjusting to COVID-19 April | 2020 In today's critical situation, organizations are getting prepared for business resilience and employee safety as a first step toward fighting against the coronavirus pandemic. Enterprises are supporting government initiatives and prioritizing the safety of their employees, who are now working from home on business-as-usual tasks, including IT infrastructure

administration, monitoring, and compliance management. A remote workforce brings vital benefits to a business in terms of enhanced

productivity, reduction in the spread of the virus at the workplace, and

reduced operational costs, which can be utilized to invest in employee safety. The adoption of Software as a Service (SaaS)-based services has recently increased, with organizations buying licenses to enable remote working for employees yet without understanding the associated security risks introduced by unknown threat vectors. A comprehensive and practical approach is required to mitigate the business risks from undiscovered cyberattacks. Another critical factor is a trusted partner who can provide unified end-to-end services to effectively manage new ways of working. A tailored emergency advisory service is the need of the hour to compete against the cyber threats brought about by the pandemic. Organizations are enforcing remote working policies for employees, but that's not enough to protect against modern threats emerging from the adoption of SaaS services and the relaxation of Bring Your Own Device (BYOD) policies. In the era of Internet of Things (IoT) connectivity and automation at scale, organizations must think beyond ad hoc workforce solutions such as remote access. A control framework should be mandated that's not limited to a remote access solution, which would be focused on providing the resources and support for enabling supporting employees to work from home. An overall solution should focus on fortifying perimeter defense controls, reviewing and streamlining existing IT processes, enabling continuous attack surface visibility, and deploying required security controls that will protect from the abrupt leap of cyberattacks and an organization's evolving digital environment. As enterprises respond to the worldwide pandemic, changes in business processes driven by lockdowns are having dovetail effects on IT. As IT teams come to terms with increasing demands to enlarge enterprise perimeters and provision remote working, a number of cybersecurity challenges are emerging: Cybersecurity experts need to support enterprises during this journey by helping them identify new cyber threats and assess the gaps in their security controls. Typically, enterprises can take the following four steps to secure their infrastructures from the current and any future crises: Business Resilience Strategy: Safety First! While the authorities and the World Health Organization (WHO) balance containment measures against the cost of social and economic disruption, businesses must create a cyber resilience strategy that balances preparations and responsive actions. The immediate recommended strategy is to promptly assess and respond to business continuity risks brought on by the outbreak and fortify their infrastructures to protect against cyberattacks. Below is a cyber resilience framework that provides high-level considerations for crisis management. Cybersecurity Resiliency & Monitoring As this pandemic unfolds, organizations need to prioritize resiliency more than anything else. This includes how to sense, resist, and respond to disruptive cyber events, and, if needed, to recover from them within an acceptable timeframe. Cyber resilience is a cultural approach that requires a top-down adoption for managing the risks and building resilient environments aligned with the business cybersecurity goals. The security control framework needed to reach these goals consists of a basic triad that involves people, processes, and technology, but it must also meet regulatory and legislative compliance requirements. These would include guarding against legal, contractual, and third-party risks, as well as instituting continuous compliance monitoring for cyber threats and associated countermeasures. An emergency advisory service can help organizations mitigate threats while their workforce, including security operations and compliance teams, is working from home.

To effectively build the resiliency for this pandemic situation, organizations need to focus on the following four key pillars: Adopting a Holistic Approach Enterprises today need a unique, comprehensive approach to discover, identify, prioritize, and remediate risks associated with the pandemic and its overall impact on an organization's security posture. For a quick and independent assessment of your enterprise security posture and its ability to respond to the crisis caused by the pandemic, please get in touch. www.wipro.com/blogs/edwin-daniel/ ---- Contact Wipro Blogs By Author How the Hospitality Industry Can Take a Proactive Approach to Crisis Recovery Please fill the required details to access the content Edwin Daniel Edwin Daniel Senior Manager, Travel Transportation & Hospitality, Digital Operations & Platforms Edwin has over 18 years of experience in the BPO industry handling various portfolios like Service Delivery, Operations, Workforce Management, IT Software Sales, Account Management for major Airlines. Over the period, Edwin has been extensively involved in Travel and Hospitality presales efforts and GTM activities. He also has a keen interest in partnering with new technology companies to augment the travel and hospitality services capabilities. The Travel industry's growth over the last two decades has led to the corresponding growth of the Hospitality industry, a now \$600 Billion global industry that directly and indirectly employs 250 million people. However, the recent COVID-19 outbreak is having a devastating impact on the world, leaving the travel and hospitality industries 

### How the Hospitality Industry Can Take a Proactive Approach to Crisis Recovery

----- Arcticle source ----- https://www.wipro.com/blogs/edwin-daniel/how-thehospitality-industry-can-take-a-proactive-approach-to-crisis-recovery/ -----About the Author Contact Wipro Related Blogs Data: A Strategic Asset Enabling Value Creation for Insurers All about NIGO (Not In Good Order) Insurance Service Forms What Banks Need to Know About Nordic Cross Border Payments or P27 Please fill the required details to access the content How the Hospitality Industry Can Take a Proactive Approach to Crisis Recovery April | 2020 The Travel industry's growth over the last two decades has led to the corresponding growth of the Hospitality industry, a now \$600 Billion global industry that directly and indirectly employs 250 million people. However, the recent COVID-19 outbreak is having a devastating impact on the world, leaving the travel and hospitality industries reeling from its repercussions. Assessing the impact of COVID-19 on the hospitality industry Across the globe, the entire industry stands in solidarity, supporting those affected and extending support to government efforts, like providing space to hospitals in need. Businesses are pitching in despite huge revenue losses, property shutdowns, and large financial cuts for employees. Many large hotel chains have reported occupancy ranges below 50%, while

in some areas, others are experiencing less than 15%, resulting in no revenue and facility shutdowns, all while having to maintain operational and fixed costs. Lodging businesses are set to decline 60-65% for Q1 YoY with a projected revival timeline of as much as 3-5 years to be at par with pre-COVID-19 forecasted growth. The main challenges faced by the industry are broad: Implementing strategies for survival and growth Reviving the hospitality industry and rebounding from the crisis will require its management to be patient. Key focuses will be twofold: reengaging past customers from where they left off and identifying newer non-core areas for additional revenue simultaneously to contain costs. Here are some key actions the hospitality industry needs to take: Rejig Revenue Management: Revenue Management needs to revise all forecasting models to revive business, leisure, and group bookings. This involves repricing inventory, as well as offering complementary services, promotional discounts, and competition-based dynamic pricing. Reimagine Marketing: Marketing teams need to be creative with offerings -- now's the time to try it all. For example, targeted marketing campaigns specifically focused on segmented audiences and goodwill offers for existing customers are recommended activities. Additionally, create customer-focused brand promotions across your channels -- e.g. special attention can be given to the specific steps taken to maintain hygiene on the premises to give customers the confidence to visit. Alternate Service Model: During the crisis and recovery periods, hotels can look for alternative service models to increase revenue. Usage of conference rooms for social gatherings and catering services, as well as redesigning Food & Beverage delivery are some examples of improvised services. Rationalize Finance: While taking measures to increase sales, hotels also need to decrease expenditure and capital costs - some of which will be difficult. Internal cost-cutting measures such as pay cuts and consumables cost reductions, along with external measures like tax concessions and loan rate revisions from banks and governments, are good starting initiatives. Capital spend cuts by deferring dividends payouts, expansion plans, and investment strategies will help hotels sustain working capital until the industry revives. Building a resilient strategy for post-pandemic growth Until things fall back in place, the hospitality industry will need to stay strong using tough, creative measures so they can sustain themselves, their employees, and their customers. The fighting spirit and the maturity of the industry that we saw following the 2008 market slump and 9/11 will be seen once again in the days to come. Reference 1- https://www.statista.com/ statistics/247264/total-revenue-of-the-global-hotel-industry/ 2- https:// brandongaille.com/15-hospitality-industry-employment-statistics/ 3- https:// www.atomize.com/post-covid-19-hospitality-industry 4- https:// www.hotelmanagement.net/asset-management/hotelave-projects-5-yearrecovery-for-hotels-after-covid-19 Industry: Edwin Daniel Senior Manager, Travel Transportation & Hospitality, Digital Operations & Platforms Edwin has over 18 years of experience in the BPO industry handling various portfolios like Service Delivery, Operations, Workforce Management, IT Software Sales, Account Management for major Airlines. Over the period, Edwin has been extensively involved in Travel and Hospitality presales efforts and GTM activities. He also has a keen interest in partnering with new technology companies to augment the travel and hospitality services capabilities. The insurance industry has tradionally relied on data sources such as claims history to underwrite known and measurable risk. When a

### Labor cost optimization strategy for

#### the contract catering industry

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is a number in itself and performance is a qualitative measure, various matrices can help understand the extent of the success or failure of the cost order. Several KPIs can be used to assess this: The variances here, when benchmarked against internal/external indicators can indicate: Combination of technology and human intervention Demand forecasting Since wages account for nearly 70% of the total labor cost, the first step towards reducing labor cost is to get the forecasting right. Demand forecast in a catering business needs to show the shape of the day and the anticipated demand. Demand is forecast typically in blocks of hours (9am-12pm, 12pm-3pm, 3pm-6pm etc). That way, managers can see exactly how many employees they need in each area to meet that demand. It also takes into account exactly how much time employees need to deliver each activity. This even includes non-revenue-generating (but necessary) activities, like preparation and clean up. This type of forecasting is a typical use case for supervised machine learning regression, which can make accurate predictions utilizing many factors like seasonality, changing trends, local events, holiday periods, time of the day etc. It can create schedules that cater to the unique demand of each location, helping to avoid over or understaffing across the organization, both of which have significant cost implications. Right employee mix Finding the appropriate mix of skill sets (Manager, chef, cashier etc) and employee type (full time/part time) can be a challenge. The consistency provided by the permanent staff heavily outweighs the expense due to additional benefits like health care, pension etc. Artificial Intelligence (AI) solutions that work toward optimization3 can be explored. Closed loop intelligence optimization 4 is an iterative method where results are compared and fed back to the system to find the optimum mix. The right employee mix is the optimum combination of workers at the lowest possible cost with maximum productive efficiency. Attrition The attrition rate in the contract catering industry is high since they hire the highest percentage of students to keep costs low. This employee base is transient and easily switch to other opportunities for a marginal increment in wages. The key to retention here is flexibility and training opportunities to upskill. Using AI solution built on preference learning can recommend potential shifts to employees based on their previous scheduling preferences. This self-scheduling can provide fair, equitable, balanced schedule that meets their requirements as well as the company's business requirements. While AI/ML can definitely contribute towards employee retention, some additional humane measures can go a long way. These include: Continuous monitoring Triggers can be set up based on continuous learning that can push out notifications where: Timely information as well as using AI/ML learning can pave the way for intervention to remediate the issues that can have significant bearings on the cost element. To Conclude Effective use of AI in key areas can be a significant differentiating factor in the catering industry. Its use can range from forecasting demand, planning promotional activities, reducing employee attrition to getting the optimum labor mix. These in turn can reduce wastages in both labor and food, thereby increasing productivity and margins. However, AI can only be successful when used in conjunction with humane initiatives to improve employee morale and satisfaction. This winning combination can be the definite success mantra for businesses. Reference 1 https://www.gov.uk/ national-minimum-wage-rates 2 https://en.wikipedia.org/wiki/ Minimum wage in the United States 3 https://www.researchgate.net/

publication/326274817 Optimization of Team Mix to Reduce Cost and Increase Profitability in Projects and Bids 4 https://www.hrtechnologist.com/articles/digital-transformation/how-ai-istransforming-workforce-management/ Industry: Priva Kanniah Managing Consultant, Data Analytics & AI, Wipro Priya is a techno functional consultant with over 15 years of analytics experience across industries such as banking, asset management, insurance consumer electronics etc. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the source ----- https://www.wipro.com/blogs/venkat-srinivasan/ ----- Contact Wipro Blogs By Author Learning During (and From) Crisis Please fill the required details to access the content Venkat Srinivasan Venkat Srinivasan Director of Higher Education, Wipro Venkat has over 25 years' experience with strategy, technology and operations of the education industry. His areas of interest and expertise include higher education management, student retention and digital technology solutions for connected student experience. Venkat has been a speaker at industry events, published several thought leadership articles and has a point of view on most pressing issues faced by the Education industry. How online education tools need to be reinvented so ---- https://www.wipro.com/blogs/venkat-srinivasan/learning-during-andfrom-crisis/ ---- About the Author Contact Wipro Related Blogs Customer Experience Modernization Through Next Generation Contact Centers Higher Ed and Cyber Security: Learning from the Blackbaud Breach Rethinking universities by putting student experience front and center Please fill the required details to access the content Learning During (and From) Crisis April | 2020 The pandemic resulting from COVID-19 has impacted our world in nearly every way imaginable. Many people are now working from home, while others have lost their jobs or been furloughed. Public parks and other gathering places have been closed. The Travel and Hospitality industries have had to rethink their offerings. And college campuses have become de facto ghost towns. The truth is that the novel coronavirus and its global effects are unprecedented phenomena, and we have yet to see what the ultimate impact will be to our daily lives -- for both the near and far-reaching future. Like many industries, higher education is doing what it can to keep business going. Our global predicament begs simple questions like "When can school and university campuses open again?" to more complicated questions like "How can these organizations continue to operate and educate effectively during the age of quarantine and social distancing?" Many institutions are rethinking core offerings to accommodate our world's new reality and those relying on it -- students and faculty. Immediate and long-term implications for teaching, learning, the student experience, infrastructure, operations, and staff all must be

considered. Naturally, the solutions aren't simple, but one fact is clear: remote learning needs to step up to the occasion -- addressing current challenges and leveraging newfound opportunities. The pre-pandemic world of remote learning Remote learning options have existed for many years now, albeit with varying degrees of acceptance. It's always been considered a poorer cousin to face-to-face learning -- the gold standard. In the minds of most, everything else pales in comparison. Logistically, the tools that make remote learning possible have existed for guite some time. Unfortunately, many times educators find themselves retrofitting videoconferencing technology to fit the classroom, rather than seeing developers creating tools with them specifically in mind. Up until now, this focus has created a situation where remote learning was an option -- but not the preferred one. According to recent reports, only 30% of our country's 1.5 million faculty members have taught a virtual course in the past. But in 2020 we've found ourselves in a situation where remote learning is more than a perk -- it's essential -- meaning both students and teachers need to adapt. Online learning has now been afforded a place at the high table of university learning, positioning it for a very different future than what we expected even just weeks ago. Keep reading for a glimpse at some of the challenges we face, as well as some key considerations. Empathy in the remote learning world One major consideration developers and educators must keep in mind is that education is not a one-size-fits-all scenario. Online learning technology must consider and accommodate the varied learning preferences and styles of both educators and students. Significant success will come from creating platforms and tools built around the intent of the program, rather than expecting educators to adapt to the limitations and expectations of preexisting software. This focus on the needs of students and educators brings empathy into the experience, which will emerge as a crucial differentiator when universities seek to deliver as real an experience as possible online. Catching them young: early remote learning Pandemic or not, our world has been moving toward greater acceptance of remote learning options since they became available -- our new reality has simply kicked that movement into overdrive. As time progresses and we discover our new normal, education will see greater acceptance of online education tools. This doesn't stop with higher education, though. We'll soon begin to see added impact at early learning stages. And because children are more intuitive with technology, having them acclimate to remote learning at an earlier age will prompt greater acceptance of university-level online education. It's the ideal opportunity to establish remote learning with younger students who are typically more willing and able to adapt. However, it's important to keep in mind that educators will also need to learn and adapt to these platforms, both now and in the future. By engaging and supporting both students and future educators early, we're likely to see greater success and effectiveness for remote learning. Bridging the digital divide Any discussion about remote learning wouldn't be complete without considering one key factor: access. While new and emerging technologies are oftentimes incredible and even game-changing, do they come at the expense of alienating those who cannot afford what the market would consider premium hardware? If a program can only run on a platform that many students don't have access to, should we consider that a sweeping success? The true potential of remote learning at the university level will truly be unlocked when it approaches both students and teachers with an

attitude of inclusivity. The intent when developing these technologies must be providing education that's facilitated by technology, rather than being dependent on it. It will take creative solutions to deliver a great learning experience that's not constrained by income or privilege. So what's next? Nobody in the world is immune to the sweeping changes the educational landscape is seeing now. Online learning is emerging as the biggest differentiator, but there is a catch. It calls for the most disruptive type of change there is -- change in mindset. The need for educators to adapt their businesses won't end with them signing up for the latest, greatest remote learning platform. Instead, universities, administrators, teachers, students, and technology folks need to recalibrate their approach to a changed world. Similar in theory to the concept of flattening the curve for COVID-19, remote learning can flatten its own curve of adoption by both students and educators in a few different ways. It's only once the industry addresses key topics like acceptance by students and educators, empathy in the development of tools, and realistic access for all students that remote learning can truly deliver for everyone. By doing so, we could witness the beginning of a bold future for remote learning. Want to learn more about how Wipro is helping educators with swift, steady, and smart remote learning solutions? We'd love to talk. Industry: Venkatraman Srinivasan Director of Higher Education, Wipro Venkat has over 25 years' experience with strategy, technology and operations of the education industry. His areas of interest and expertise include higher education management, student retention and digital technology solutions for connected student experience. Venkat has been a speaker at industry events, published several thought leadership articles and has a point of view on most pressing issues faced by the Education industry. Today's new age customers have ushered in the need for redefined technology enhancements, that are all about conversational interfaces and AI (artificial intelligence) assisted services. On the operational level, traditional metrics continue to be driven by productivity, and finally, at the emotional needs level, there is a requirement to address the emotional quotient of both the customer and the agent. As of July 30, 125 organizations claimed to have been affected by the Blackbaud security breach that occurred in May of this year. Of those groups, nearly half are schools or universities, highlighting a trend of increasingly complex ransomware attacks on learning institutions. To keep up and stay secure, schools need to modernize more strategically. The outbreak of COVID-19 and the way it is disrupting lifestyles and businesses is unprecedented. This change is going to be tough for universities that have traditionally found it https://www.wipro.com/blogs/gaurav-chadha/ ---- Contact Wipro Blogs By Author COVID-19 and Beyond: Leading the Change Please fill the required details to access the content Gaurav Chadha Gaurav Chadha SVP & Global Head of Insurance, Wipro Gaurav has over 24 years of experience in the IT industry across various leadership roles that spans Client engagement, Delivery and Practices. He is currently the global head of the Insurance vertical at Wipro An adversity with significant humanitarian and economic 

#### **COVID-19 and Beyond:**

#### Leading the Change

----- Arcticle source ----- https://www.wipro.com/blogs/gaurav-chadha/ covid-19-and-beyond-leading-the-change/---- About the Author Contact Wipro Related Blogs Data: A Strategic Asset Enabling Value Creation for Insurers All about NIGO (Not In Good Order) Insurance Service Forms What Banks Need to Know About Nordic Cross Border Payments or P27 Please fill the required details to access the content COVID-19 and Beyond: Leading the Change May | 2020 An adversity with significant humanitarian and economic fallout COVID-19 or Coronavirus outbreak has been rapidly proliferating, necessitating lockdown of the once-crowded cities. The uncertainty created by this unprecedented crisis is casting a deep impact on our physical, mental and economic well-being. With financial markets in turmoil and economic activity coming to a sudden stop due to lockdowns, the economic impact of COVID-19 is already significant and is expected to increase further in the weeks to come. As economies grapple with significant cuts in consumer spending, severe disruptions to supply chains, and major interruptions in travel and tourism, the global GDP growth outlook for 2020 looks bleak. With its significant humanitarian and economic fallout, COVID-19 presents the most serious global crisis of our generation. Impact on the insurance industry COVID-19 has already put to test the resilience of the insurance industry across the globe, meanwhile the overall impact looks manageable given majority of insurers in the past decade have strengthened their balance sheet and embraced digital, albeit at a lower scale than their counterparts in other industries. Operational resilience tested: On the operational front, insurers are being tested through closure of offices and restrictions on travel - forcing them to adopt remote working protocols. New business volumes have also taken a significant hit with immediate impacts being witnessed due to lockdowns and interruptions in aviation and trade. This could result in liquidity issues as decline in premiums volume will strain cashflows and some claims payments will be accelerated due to COVID-19. Financial market turmoil stressing solvency: The lasting impression of this event on insurers will be in the form of the financial market meltdown. Life insurers, especially the ones with capital heavy product portfolio, are witnessing significant adverse impact, primarily from falling equity markets and volatile fixed income markets since life insurers are significant custodians of long-term capital. With insurers witnessing significant losses in equity value over the past three months, this is likely to hurt solvency positions of insurers - a fact which the regulators and credit rating agencies recognized and responded through various measures like mandatory stress tests. Manageable underwriting exposures: On the Property & Casualty side, the restrictive policy language with pandemic being an exclusion in most policies will likely limit the direct exposure to claims in most of the business lines. However, business lines such as travel insurance, credit insurance and events cancellation policies are likely to trigger increasing amounts of claims. Meanwhile, the payout of claims under business interruption (BI)

policies is not yet clear as the terms and conditions of these policies are being subjected to pressure from governments and politicians. On the life insurance side, claims are expected to be within insurers' manageable limits. Insurers response: Triumphing over adversity As insurers deal with the immediate impacts of this disruption, a critical first step must be to establish a dedicated task force covering all areas of anticipated impact. Traditional Business Continuity Planning approaches may fall short in fully addressing the multitude of challenges emerging out of this global pandemic. Meanwhile, apart from addressing the near-term implications, insurers should leverage this opportunity to develop a long-term view by reimagining their organization in the new normal. In our view, insurers can successfully navigate the challenges by focusing on four vital dimensions: Intermediaries plays a critical role in shaping a great customer experience. During the pandemic, it is expected that intermediaries will receive huge number of gueries regarding policy coverages and claims support from their clients. Insurers should support and enable their distributors (agents, brokers, partners) to confidently handle these conversations. Regular communication with clear messaging coupled with any virtual training intervention if needed on digital and collaboration tools will help Intermediaries in resolving client queries. The current scenario provides a good opportunity for insurers to review the viability of their existing distribution model and the ways to overcome its limitations. While doing so, they must also consider the evolving role of digital channel and its cost effectiveness over other channels. Reference [1] Source: Official website of the Department of Homeland Security (https://www.us-cert.gov/ncas/alerts/ aa20-099a) Industry: Gauray Chadha SVP & Global Head of Insurance, Wipro Gaurav has over 24 years of experience in the IT industry across various leadership roles that spans Client engagement, Delivery and Practices. He is currently the global head of the Insurance vertical at Wipro The insurance industry has tradionally relied on data sources such as claims history to underwrite known and measurable risk. When a customer uploads an outdated version of forms or ones with missing signatures, the agents experience an interrupted workflow because they have to re-evaluate these forms for the accuracy of the seeded information. While P27 is expected to bring many efficiencies to the payments system in the Nordic region, participating banks will need to take deliberate steps to prepare for this new www.wipro.com/blogs/abhijit-patil/ ---- Contact Wipro Blogs By Author How AI and digital technologies are revolutionizing claims outcomes Please fill the required details to access the content Abhijit Patil Abhijit Patil Director -Analytics, Wipro Abhijit is a data management consultant with proven experience in leading teams to analyze business processes, gather system requirements, design solutions, and deliver and manage large programs in retail, CPG, life sciences and hospitality industries. The advancements in areas like machine learning, robotics and IoT devices will bring a drastic shift in the way claims are processed, managed and reported today, thereby resulting in better operational performance and improved customer satisfaction ===============

### How AI and digital technologies are

#### revolutionizing claims outcomes

----- Arcticle source ----- https://www.wipro.com/blogs/abhijit-patil/how-AIand-digital-technologies-are-revolutionizing-claims-outcomes/ ----- Internet of Things (IoT) Drones Machine Learning About the Author Contact Wipro Virtual Customer Service Agents (VCSA) Virtual Personal Assistants Wearable Devices Related Blogs AI Driving 5G Innovations for Communications Service Providers Making ML Models in Banking Resilient using Adversarial Attacks Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Please fill the required details to access the content How AI and digital technologies are revolutionizing claims outcomes April | 2020 Insurers, across the globe, face new challenges each year that make it tougher to maintain the bottom line while supporting high standards of customer satisfaction. Insurers were traditionally dependent on the information collected by investigators and provided by claimants. In the new era, technology has transformed collection and analysis of data completely. Digital technologies like Internetof-Things (IoT), Machine Learning (ML), Robotic Process Automation (RPA), Drones, to name a few, have opened new avenues to collect real-time data, to better-predict future events, to access hazardous regions without risking human lives, and to expedite the response time, leading to enhanced customer experience and better business outcomes. However, according to Gartner's digital maturity assessment, only 15% of insurance business and IT leaders consider their organizations to be "digitally progressive". Outcomes of operationalizing information Top challenges in claims management Insurers face the need to resolve these challenges to optimize their claims operations: Handling the challenges with modern technologies The insurer willing to embrace the latest technologies and willing to go the extra mile will stand out in the competitive market place and be the winner. However, not every company operates in the same way; hence, the solutions to the challenges cannot be the same and will vary depending upon the specific operating model in place. The goal for all insurers is to improve revenue and reduce cost. They need to adopt innovative technologies and embrace the new ways of performing business. Depending upon the goals, both short-term and long-term, an insurer may want to consider one of the following proposed solutions, or have a customized mix of solutions, to achieve the optimum results. Some sample applications are: Robotic Process Automation Robotic process automation can enable improved claims processing in many ways. RPA enables execution of transactional and administrative tasks that are rule-based, repetitive, and frequent. This fits in well with the need of insurance companies to gain operational efficiencies with back-office operations such as claims processing, data entry, and policy application handling. RPA can be adopted in routine processes for streamlining. Robotic process automation can optimize claims processing in

some important ways: RPA can reduce the need for utilization of human resources such as claim adjusters in claim processing. Smart devices that you use in your daily life can communicate with each other and share valuable information. This information, if exchanged between the insured and insurer, can improve performance in various areas ranging from the quick and easy claim notification to providing exceptional customer service. As Internet usage increases year-over-year, with most of the Internet usage driven through smartphones, a live chat based customer support is the most effective medium for providing customer service. Insurance companies can take customer service a step further and introduce Artificial Intelligencedriven virtual agents to provide customer support wherein each customer receives a tailored service based on the policy/claim information related to the insured, thus reducing the wait time and effort by the insured to contact insurance companies. Customers can initiate chat from smartphone/web with the VCSAs to notify a claim, enquire the claim status or even seek suggestions on risk management. With the advancements in areas like Artificial Intelligence, Natural Language processing, Optical Character Recognition (OCR), VCSAs can provide personalized and close to human-like support to the customer. The VCSA can ask intelligent questions to get the relevant information from customer, specific to the claim instead of a generic questionnaire. The claim will be processed faster by reducing the waiting time to receive information from the claimant. However, it is still expected that a conversation be initiated by the user manually using a smartphone or web unless virtual assistants are deployed to sense the environment and notify the insurer automatically about a pre-configured invent that suggest a possible loss. Users can interact with virtual assistant technologies, like Google Home or Amazon Echo, to request tasks execution such as making online reservations for services, making phone calls, etc. Such devices, with customized configuration, can send alerts of situations that may potentially lead to a loss. For example, the device can send an alert to the insured and insurer when the smoke alarm goes off and no action is taken for a pre-defined time. This functionality enables the insured and/or insurer to take the necessary steps to prevent or reduce the loss due to fire or other perils or may even initiate notification of loss event. 80% of today's customer engagements can be supported by bots. Wearable devices are becoming popular in the market and its usage is increasing day by day. This increased usage of fitness trackers, smart watches, smart shoes, and even smart clothing, has created enormous amount of data which can be used for analysis. Exploitation of this data can help build predictive models that can alert the insured of potential adverse impacts on health due to shifts in lifestyle. Sending such alerts to the devices of the insured along with suggestions will help avoid adverse impacts. The application of such a model can help prevent and/or reduce the loss in the area of Health coverage and Workers' Compensation. In their search for finding new ways to improve operational efficiencies, insurers have started exploring the use of drones (unmanned aerial vehicles) for claims investigation and processing. Drones can be very effective in situations where safety of the adjusters and rapid deployment of adjusters is needed, such as in the case of catastrophe, environmental impairment, and accident related claims. Similarly, in cases of auto accident claims, deploying drones to survey the accident site, provide images of the accident site, or aid in accident reconstruction can prove to be very effective. The benefit realized by the insurers would be

lowered costs, since the cost of deploying drones would be cheaper than deploying claim adjusters. An additional benefit realized to insurers would be a reduction in workers' compensation claims made by claim adjusters since drones would be able to go into areas such as catastrophe areas where safety of claims adjusters would be of prime concern. Another area where drones could be very effective is the surveillance and monitoring of disability claims. Insurers could provide adjusters with discreet ways to gauge the physical activity of claimants claiming disability, and then either, verify or disqualify disability claims. This would help insurers in reducing fraudulent claims, as well as the cost of hiring special investigative units for surveillance and monitoring. However, one key issue that insurers could face using drones is regarding the privacy of claimants. To address this concern, a few states have passed laws that talk about restrictions on taking images and videos of individuals. Insurers would have to deal with regulations before utilizing drones for surveillance With increasing requirements from insurance regulators to report and maintain good solvency status, it is important for insurance companies to report close to actual estimates of the claim liability that the company holds in terms of claims reserves. Adopting machine learning for estimating claims reserves, the periodicity can be reduced to a point where it is close to real-time estimation, thereby allowing better reporting of estimates and reduction in time spent on data preparation for reporting. Since machine learning depends heavily on learning from the decisions made along the way, it is possible to account for factors like inflation, changes in actual claim settlement amounts, changes in claim data due to major economic events, or even changes in actuarial philosophy of company for reserving adjustments. Today, some of the modern claims management systems allow a user to set and maintain a reserve based on information pertaining to the claim. However, this process of adjusting the reserves is manual and one cannot expect claims management team to review each claim and update the reserve periodically on a timely basis. Machine learning, if integrated into the core claims management system, can perform real-time claim level adjustments to reserves and additionally perform adjustments at a pre-determined period, so that they more accurately reflect the potential ultimate value of the claim at that point in time. In the process where a system is trained about the reserving patterns, it can also be trained with potential fraud indicator with additional feed from predictive models to improve the accuracy of flagging of potential fraudulent claims. With an average of 10% of claims being fraudulent, machine learning can help improve the efficiency in claim process by identifying more accurately, thereby saving cost and time in deploying claims investigators. Machine learning, as a system, learns from the behavior of the user over period and thereby develops a trend of possible actions in different scenarios. Hence, one of the constraints to implementing machine learning is that it needs to learn from the decisions made by actuaries that can lead to a longer learning duration. However, if the system is trained to study the historical actions taken to adjust the reserves and an input is provided of the reasons for adjustments, the duration of learning can be reduced. In addition to new technologies, operationalizing information to improve claims outcomes requires a shift in leadership mindset, talent models, organization design, company culture and the skills needed for success. The disruptive impact of new technology and new claims processes is fundamentally re-writing the way claims

organizations operate. Conclusion The advancements in areas like machine learning, robotics and IoT devices will bring a drastic shift in the way claims are processed, managed and reported today, thereby resulting in better operational performance and improved customer satisfaction. The use of robotic process automation will allow claims organization to involve right resources at the right time and improve the claim outcomes. Drones will enable efficient processing of claims. Introduction of machine learning in claims reserving and loss estimation processes will help improve the frequency and accuracy of the reserving, thereby providing opportunities to improve regulatory reporting and investment strategies through the maintenance of appropriate capital ratios. Fortunately, the use of several emerging technology tools can support efficient claims processing, which will be a key to better customer satisfaction, thus better customer retention. References https://www.gartner.com/en/documents/3165520/predicts-2016new-technologies-and-business-models-will- http://www.iii.org/fact-statistic/ fraud https://wiki.scn.sap.com/wiki/display/ERPFI/FSCM+General+Overview https://consumer.findlaw.com/consumer-transactions/drone-laws-bystate.html Industry: Abhijit Patil Director - Analytics, Wipro Abhijit is a data management consultant with proven experience in leading teams to analyze business processes, gather system requirements, design solutions, and deliver and manage large programs in retail, CPG, life sciences and hospitality industries. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. 

### How can the airline industry prepare

#### for revival post COVID-19

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consulting and transformation engagement. He has more than 19 years of industry experience, providing supply chain solutions in Telecom, Hi-Tech & Manufacturing, Retail, Communications, Airline and Lifestyle industries. Mr. Panda has provided complex supply chain and manufacturing solution designs, which were successfully presented at Oracle Open World- 2015, 2018 and 2019. He manages the Oracle Cloud Supply Chain Planning, Manufacturing and Maintenance consultancy at Wipro. He can be reached at Subhashish.panda@wipro.com to discuss more if interested about the solution. Mitigating the challenges of procurement and supply risk Real-time inventory visibility with Wipro's solution on Oracle Supply Chain

# COVID-19 Disruptions: Inventory Optimization & Planning Solution

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line for quality. This could take over 48 hours before actual production begins—during which workstations will be idle. Moreover, the manager needs to set a target to avoid over-manufacturing. This is because products have a shelf life (in our example, the glass bottles may get contaminated in storage and plastic caps may deform over time). What the planner needs is a tool that allows accurate inventory shelf life planning and effective inventory management. The tool needs to forecast inventory excess based on current on hand, future outbound shipment schedules and inbound supply or work order in progress. In addition, the tool needs to provide an early warning for excess inventory as well as real-time inputs on inventory at various global warehouse locations. Wipro has created a tool integrated with Oracle Supply Chain solution to obtain the inventory solution efficiently. It also generates a dashboard and reports to identify excess inventory scenarios that help drive informed decisions regarding production continuity of FGs. Planners or Warehouse Managers would benefit from the solution, during the current COVID-19 lockdown as well as post. The system will help planners make an informed decision as far as effective inventory optimization and planning is concerned. The solution does not require major transformation and can be up and running in less than 5 days—which makes it a highly attractive solution for organizations impacted by COVID-19 related restrictions and challenges. Industry: Subhashish Panda Senior Solution Architect - Supply Chain & Manufacturing at Wipro Subhashish Panda is a Senior Solution Architect - Supply Chain & Manufacturing at Wipro and is involved in a wide range of consulting and transformation engagement. He has more than 19 years of industry experience, providing supply chain solutions in Telecom, Hi-Tech & Manufacturing, Retail, Communications, Airline and Lifestyle industries. Mr. Panda has provided complex supply chain and manufacturing solution designs, which were successfully presented at Oracle Open World-2015, 2018 and 2019. He manages the Oracle Cloud Supply Chain Planning, Manufacturing and Maintenance consultancy at Wipro. He can be reached at Subhashish.panda@wipro.com to discuss more if interested about the solution. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to reexamine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

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### COVID-19 Disruptions: Procurement

### & Supply Chain Solutions

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Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content COVID-19 Disruptions: Procurement & Supply Chain Solutions April | 2020 Manufacturers, retailers, telecoms and utilities are dependent on their OEMs for raw materials and semi-finished goods. Supply chains have been severely disrupted and there is widespread uncertainty in supplies due to the COVID-19 pandemic. Orders are in complete disarray. The problem is more complex than previously imagined. For example, a manufacturer will know supplier lead times for raw materials, but there could be delays in transportation because of differing region-wise lockdown notifications; the manufacture could be classified by the government as an "essential service" and allowed to reopen the plant, but the supplier may fall in the "non-essential service" category, breaking the chain. During disruptive events such as the worldwide emergency triggered by COVID-19, manufacturers need complete visibility into inventory, raw material, all open and pending sales orders, orders that require raw materials (which could be from more than one vendor) and the volume of each order that can be fulfilled, along with timelines. A typical medium-sized plant would be shipping 200 to 300 orders every day. That's 1,500 orders in 5 days. This is a large number and it is difficult for the manufacturer to go through each order, map it to raw material inventory and identify procurement dependencies and re-plan supplies. The solution is a tool that analyzes orders, raw material inventory, delays in supplies, alternate vendors and their delivery timelines. This can be done in an Excel worksheet, which is normally the case. However, these are unprecedented times. The additional challenge is that an analytical task like this requires 4 or 5 people—who may not be available in times of distress like a pandemic. An automated tool (integrated with Oracle Cloud Supply Chain) could do the same work in a matter of hours if not minutes. The tool could also simulate all extenuating scenarios due to transportation delays and pinpoint orders affected along with the days of delay. Besides, it would take only one person to execute the analysis. There are several other advantages of a tool of this kind: A supply chain tool that addresses inbound challenges and has the above capabilities is a must-have for planners. The tool would immediately reduce raw material risks and allow planners to invest the saved time and effort in locating alternate suppliers. For manufacturers, this is the right time to enhance their supply chain systems and analytics because the next disaster could be just around the corner. Industry: Subhashish Panda Senior Solution Architect - Supply Chain & Manufacturing at Wipro Subhashish Panda is a Senior Solution Architect - Supply Chain & Manufacturing at Wipro and is involved in a wide range of consulting and transformation engagement. He has more than 19 years of industry experience, providing supply chain solutions in Telecom, Hi-Tech & Manufacturing, Retail, Communications, Airline and Lifestyle industries. Mr. Panda has provided complex supply chain and manufacturing solution designs, which were successfully presented at Oracle Open World- 2015, 2018 and 2019. He manages the Oracle Cloud Supply Chain Planning, Manufacturing and Maintenance consultancy at Wipro. He can be reached at Subhashish.panda@wipro.com to discuss more if interested about the

at Subhashish.panda@wipro.com to discuss more if interested about the solution. Enterprise Mobility Management (EMM) involves the process

management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to reexamine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/prasanna-mahalingam/ ---- Contact Wipro Blogs By Author Answering the 3W's of Steampunk - SAP's new PaaS offering for ABAP Please fill the required details to access the content Prasanna Mahalingam In 2020, SAP TechEd generated considerable interest in the SAP community when they announced the general availability of SAP's new Platform as a Service (PaaS) offering for ABAP - Steampunk. Advancements on 'Restful ABAP Programming' (RAP) model also got tongues wagging. ==============

### Answering the 3W's of Steampunk

### SAP's new PaaS offering for ABAP

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architectures, there are newer things to discover and acclimatize like eclipse, newer syntax, Fiori with RAP support etc. that we can help you with. Those who still want to test the waters first, SAP offers a trial account that is a shared offering and time bound. Take care not to put in your precious code here! This feature is for developers to get a firsthand feel of Steampunk. You do have your familiar flight reference scenario (complete RAP code available in GitHub). Use this trial account to see nuances of this offering. Wipro can collaborate with you as you make your foray or start adding more value into SAP Cloud platform investments. Conclusion Like many other products from SAP, Steampunk has lots of potential for steady growth in terms of features and partner programs for early adopters. While Steampunk's ABAP cannot mount a full battle with other languages like Node.js, Java, Python, etc. in terms of versatility, the offering is shaping up nicely with a robust road map in terms of support from the SAP ecosystem. We suggest SAP customers -who have a smaller to medium footprint for Cloud usage to start with-try the ABAP PaaS - using the cloud with not much of newer technologies to contend with and getting SCP features available on need and on demand. Customers on S/4 Cloud can also definitely look at Steampunk as a good sidecar option. References: https://blogs.sap.com/2018/09/04/sap-cloudplatform-abap-environment/ https://blogs.sap.com/2019/09/28/its-trialtimefor-abap-in-sap-cloud-platform/ https://blogs.sap.com/2018/10/02/how-tocheck-your-custom-abap-code-for-sap-cloud-platform-abap-environment/ Industry: Prasanna Mahalingam Practice Director, SAP Practice, Wipro Ltd. Prasanna has more than 19 years of experience in various SAP technologies as well as vast experience in the automotive industry. He is also a part of Wipro's SAP Digital Innovation Group focused on SAP's cutting-edge technologies. He works with customers, Wipro thought leaders and SAP to usher in newer technologies, paradigms like Industry 4.0 and go-to-market strategies. He can be reached at prasanna.mahalingam1@wipro.com Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/hema-hariharan/ ---- Contact Wipro Blogs By Author 5 problems that hinder a greenfield analytics program and how to avoid them Please fill the required details to access the content Hema Hariharan Hema Hariharan Managing Consultant in Wipro's Data, Analytics & Artificial Intelligence Hema Hariharan is a Managing Consultant in Wipro's Data, Analytics & Artificial Intelligence Consulting practice with over 7 years of experience in helping clients across industries analyze and implement technology solutions to improve business performance. A greenfield analytics journey begins with descriptive analytics to make sense of the data

in place and understand current and historical performance better. Sounds simple enough, but setting the right stage in this phase is key to harnessing

the right buy-in, sponsorship, and ultimately, driving adoption.

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# 5 problems that hinder a greenfield analytics program and how to avoid them

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organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. www.wipro.com/blogs/pravin-hungund/ ----- Author's Posts Contact Wipro Please fill the required details to access the content Pravin Hungund Pravin Hungund Chief Technologist & Global Head Technovation Centre, CTO, Wipro Ltd. Pravin is a passionate technologist and innovation leader with three decades of experience in the industry. His expertise cuts across the lifecycle of innovation from conceptualization & ideation to design & build, thought leadership, and enterprise client innovation adoption. Pravin plays a major role in developing thought leadership and solutions across industries at the convergence of emerging technologies, industry processes and consumer behavior to help drive digital transformation in today's rapidly evolving disruptive world. Pravin has provided global leadership to Technovation Center, Wipro's state-of-the-art innovation incubation center since its inception in January 2013. Most recently, he was responsible for setting up the Silicon Valley Innovation Center in Mountain View, California, USA. Pravin enjoys public speaking, and has been a keynote speaker and 

### Intellectual Property: The Lifeline to

### Every Business in the Post-Digital Era

----- Arcticle source ----- https://www.wipro.com/blogs/pravin-hungund/ intellectual-property-the-lifeline-to-every-business-in-the-post-digital-era/----The value of IP Disruption in the post-digital age Convergence and collaboration as competitive advantage Driving IP creation and enabling customers to leverage innovation About the Author Contact Wipro Related Blogs 4 Ways Super Funds Can Elevate Member Experience The CHRO Imperative for the Hybrid Workplace How organizations should identify and cope with the challenges to cultural transformation? Please fill the required details to access the content Intellectual Property: The Lifeline to Every Business in the Post-Digital Era April | 2020 Between the 1990's and the latter half of the 2000's, the internet evolved from static to interactive. Industry also evolved, from physical to digital to "phygital" and cyberphysical. Today, in 2020, we are witnessing the rise of an experiential internet: smart devices working together in a converged technology landscape, creating immersive, interactive smart spaces. With the help of technology, we've continued to evolve, entering into the post-digital era of today. This post-digital world is unlike anything humanity has experienced so far. It is a world of fuzziness, simultaneously driven by complexity and hyper-efficiency, hyper-convergence and mass customization; automation, job redefinition, and remote working. Recently, it is also a world disrupted by a global pandemic. Navigating such uncertainty has thrown a spotlight on the innovations of the mind: ideas and intellectual property (IP). This World IP Day, we're taking a step back to acknowledge how innovative technology and big ideas are driving progress and helping us adapt to the future. In this post-digital era, creative solutions are among the most valuable industrial assets. Innovations help businesses adapt and give them a competitive edge. Encouraging the development of intellectual property - which can include patents, trademarks, industrial designs, even copyright for literary works, films, music, and art - is essential for innovation to thrive and industries to remain competitive. But breaking new ground is difficult. Truly great innovations take time, talent, and resources, which aren't always available. Technology accelerates the creation of intellectual property exponentially. Artificial intelligence, mixed reality, collaborative robots: These technologies democratize skill at scale, reducing the barrier to entry for businesses looking to develop their own innovations or leverage others'. With the right technology, not everyone has to be an expert. Intelligent products, platforms, and smart systems can facilitate the development of innovative solutions. Right now, industries face three major forms of disruption which are driving the need for faster innovation and IP creation:

Convergence of business processes is driving value for enterprises. Today, businesses are implementing innovations in ways which would have been unimaginable just few years back, such as the merging of gaming technology with the industrial sector to create powerful industry simulations, or IT and operational technology (OT) integration leading to consumerization of OT. Competitive advantage is the primary value of intellectual property - a business has the rights to an idea, product, or service that its competitors do not. But collaboration is also a form of competitive advantage, especially for IP. Industries need innovations to keep up, but they may not have the ideas or innovations needed to do so. They can access this IP through open source or crowdsourcing models, but do they have the guidance to navigate such models effectively? Without a strong partnership with an organization well versed in technology and innovation, will businesses be able to implement IP in a way that's truly helpful? Wipro's CTO office is dedicated to driving IP creation and enabling industries to leverage intellectual property and emerging technology for successful digital transformations. Our Technovation Center, for example, is a state-of-the-art innovation incubation center specializing in "futureproofing" enterprises. Being able to adapt to this ever-changing world is a key challenge for businesses. The Technovation specializes in the art of visualization: helping businesses visualize new approaches and tailor solutions to the complex, converged ecosystems of the future. Through immersive techniques and storytelling, gaming technology and visual mediums like CAVE (cave automatic virtual environment), holograms, and virtual reality (VR), we allow customers to experience how they can leverage IPs to their advantage. Our Maker Lab aids in technology transformations and disruptive innovations by executing joint pilot programs with our clients, start-ups, and academia. And dedicated zones within the Center enable enterprise clients to explore solutions with Industrial Robotics and drones, 5G, advanced AI for industrial automation, blockchain, mixed reality (MR), and VR. Annually, with over 400 industry, academia, and government customers leveraging our labs, we ensure each gets a view of what's in store for the future, what remains to be explored, and how we're helping industries in their guests to be more resilient. A disruptive world demands

faster innovation and IP creation. This World IP Day, let's all work to enable both enterprises and individuals to innovate and lead the way. Contact us to learn more about how Wipro is driving IP creation and helping enterprises leverage the digital tools they need. Industry: Pravin Hungund Chief Technologist & Global Head of Wipro's Technovation Center Pravin is a passionate technologist and an accomplished business leader with hands-on experience in technology consulting, business management, solution design and innovation management. He has provided global leadership for the Technovation Center - Wipro's state-of-the-art innovation incubation center since its inception in January 2013. Pravin has had the privilege of leading a full spectrum of innovation works from ideation, design and build, conceptualization, thought leadership, and enterprise client adoption of technology-centric innovations. Most recently, he was responsible for the design and building of the Silicon Valley Innovation Center (SVIC) in Mountain View, California, USA. Pravin is passionate about public speaking and has been a keynote speaker and panelist at many international technology conferences. Despite the long-standing history of private pension plans, superannuation was introduced to Australians over 20 years ago to help them support their retirement in a financially viable way. Fast forward to 2020; it is now a A\$3T business. Over the last two decades, superannuation has become complex, highly regulated, and vulnerable to scandals. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just neglected culture.

#### Intellectual Property - A Collaborative Enabler to an Intelligent Enterprise

----- Arcticle source ----- https://www.wipro.com/blogs/pravin-hungund/ intellectual-property-a-collaborative-enabler-to-an-intelligent-enterprise/-----About the Author Contact Wipro Please fill the required details to access the content Intellectual Property - A Collaborative Enabler to an Intelligent Enterprise April | 2021 With the recent pandemic, the need for emerging tech has fast-forwarded. Before 2020, emerging tech had a 12 to 24 months window to mature or fade away. Due to the pandemic, most of these emerging technologies have become part of a must-have stack to solve today's societal challenges. Evolving from a Phygital world to 'Going Digital,' an emerging tech maturity phase accelerated automation. Later, the transition of 'Going Digital' to 'Being Digital' allowed the industry to shift to a 'hands-free' operating mode. During and following the pandemic, the industry has evolved into 'Digital in the Virtual World,' leading the industry to shift to a 'human-free operating' mode. Technology Concepts Enabling 'Digital in the Virtual World' An example of the codified platform-centric approach and IT moving to the edge is the CoVigilent app (https://

covidassist.wipro.com/login). CoVigilent is an adoption of AI to COVID listening for pre-screening and triaging of COVID infections. Entire AI models were developed, pre-clinical trials and private clinical trials were completed, and apps launched at scale in a very short time. This is an example of human-free operations. The entire application had no human in the loop, from cough sample submission to AI analysis to results being relayed to end users. Lead Indicators to True 'Digital in the Virtual World' While these are primarily Fintech-centric data points, Fintech is a horizontal enabler to all other industries and reflects pan-industry trends across all sectors. Convergence of Industries, Technologies, and Digital Native Behaviors - Rise of the Intelligent Enterprise In 2020, when the pandemic had just begun, we discussed intellectual property being the lifeline of every business in the post-digital era (https://cio.economictimes.indiatimes.com/ news/strategy-and-management/intellectual-property-the-lifeline-of-everybusiness-in-the-post-digital-era/75525909). It is remarkable to see how IP has evolved from being a lifeline to a showstopper and a survival tool for many global enterprises. More interesting is the survival of the existing business models themselves - a more fundamental shift. Of course, we saw the impact of an Intelligent Enterprise when the world went into a dramatic lockdown last year. The entire ecosystem came to a standstill. However, a few companies thrived in this world of ambiguity and constraints. Amazon and Microsoft grew their sphere of influence, revenue, and customer base, while other enterprises declined in most business metrics. While Amazon and Microsoft were in the cloud and offering products essential to the industry's needs, those were not the only reasons they thrived. Far beyond just the offerings, the underlying operating modes of these enterprises made them Intelligent. Furthermore, Intelligent Enterprises will shape the future of the industry in the post-pandemic world. The Emerging Tech Landscape and Road Ahead - Autonomous, Human-free Operating Model Technological singularity may be a hypothetical event, but the exponential growth in technology due to disruptive innovation is real. The convergence of these innovations unlocks new paradigms. Consider the following converging technology themes at different layers: IT (Decision support and communication) OT (Manage, monitor, and control) ET engineering) GT (Virtual representation, gamification, and simulations) End-to-end integration of these layers with emerging technologies (Cloud, AI, IoT, Blockchain, 5G, AR/VR/MR, and Robotics) gives rise to strategic themes enabling Intelligent Enterprises: human-machine collaborative intelligence; augmented virtual reality; intelligent mechatronics, and integrated simulation and modeling. Additionally, a new convergence trend takes shape across data, operations, engineering, and game tech. The fourlayer tech landscape across IT, OT, ET, and GT convergence will shape the industry into an Intelligent Enterprise ecosystem in the coming years. These fundamental shifts make the intellectual property strategy more critical to survival rather than profitability, and leveraging open innovation systems, crowdsourcing, and collaborative innovation becomes a more fundamental societal need. Pravin Hungund Chief Technologist & Global Head -Technovation Center, CTO, Wipro Pravin is a passionate technologist and innovation leader with three decades of experience in the industry. His expertise cuts across the lifecycle of innovation from conceptualization & ideation to design & build, thought leadership, and enterprise client innovation adoption. Pravin plays a major role in

developing thought leadership and solutions across industries at the convergence of emerging technologies, industry processes and consumer behavior to help drive digital transformation in today's rapidly evolving disruptive world. Pravin has provided global leadership to Technovation Center, Wipro's state-of-the-art innovation incubation center since its inception in January 2013. Most recently, he was responsible for setting up the Silicon Valley Innovation Center in Mountain View, California, USA. Pravin enjoys public speaking, and has been a keynote speaker and panelist source ----- https://www.wipro.com/blogs/thangaprakash-kanagaraj/ -----Contact Wipro Blogs By Author Knowledge Management: The Essential Element of a Successful Digital Organization Please fill the required details to access the content ThangaPrakash Kanagaraj ThangaPrakash Kanagaraj Associate Vice President, Product head - Wipro Harmony ThangaPrakash Kanagaraj is Associate Vice President, Product head - Wipro Harmony. Holding Master's degree in Information technology and also a qualified CMA. More than 22 years of experience across business process solution design, delivery, transformation and automation leveraging technology. Currently managing Wipro Harmony SAAS based Wipro IP with 20+ clients with user base across 60+ countries. Earlier worked with GE, Fidelity and TCS. In every human endeavor, knowledge is the key to the success. The ability to harness knowledge effectively is what differentiates leaders from laggards - especially in business. ===============

### **Knowledge Management: The Essential Element**

# of a Successful Digital Organization

---- Arcticle source ---- https://www.wipro.com/blogs/thangaprakashkanagaraj/knowledge-management-the-essential-element-of-a-successfuldigital-organization/ ---- About the Author Contact Wipro Related Blogs 4 Ways Super Funds Can Elevate Member Experience The CHRO Imperative for the Hybrid Workplace How organizations should identify and cope with the challenges to cultural transformation? Please fill the required details to access the content Knowledge Management: The Essential Element of a Successful Digital Organization April | 2020 In every human endeavor, knowledge is the key to the success. The ability to harness knowledge effectively is what differentiates leaders from laggards - especially in business. But how can organizations harness knowledge to their advantage? Technology can help. Today more and more businesses are investing in technology that promises to revolutionize the way they manage information, and transform them into highly effective digital organizations. In celebration of World IP Day, we'll explore how innovative technology is enabling businesses to digitize their knowledge management systems, and find new value as digital organizations. Knowledge management: Digitization of

information and knowledge Knowledge management is the process of gathering, securing, and implementing knowledge or information. In the past, this was done manually, but manual processes were marred with errors, inefficiencies and leakages. Information was scattered throughout the organization, hidden in silos, inaccessible or sitting idle with individuals unable to visualize its potential for the rest of the organization. Information was also unstructured. There was no standardization so data and knowledge was maintained differently for different individuals to suit their needs only. And of course, key information was easily compromised. It was forgotten, misplaced, lost when an employee left the organization or when a contract expired with a partner or a vendor. Sometimes it was withheld, preventing businesses from leveraging it for market advantage. Traditional knowledge management systems encouraged inconsistencies, silos, and mishandling of knowledge, which in turn negatively impacted business and operations. Now compare this to today's tech-driven knowledge management systems, which allow for an efficient flow of data and instructions. This means better governance, control, and visibility for decision makers, making overall business much more secure, agile and rewarding. As organizations go digital, knowledge must too While adopting cutting-edge technology to simplify and drive business efficiencies remains the primary interest of digital transformation, organizations are beginning to focus on digitizing their information as well. Digitized knowledge management ensures business success by making knowledge available to stakeholders at the click of a button - or even better, automatically, as soon as the system identifies a need. Digitization also enables robust decision making. With sufficient, wellstructured data, a business can make more informed decisions and establish a better name for itself in the marketplace. Sounder decisions also increase the chances of achieving organizational goals, immediately and in the longrun, leading to more sustained profitability. Today, there are so many digital platforms that contain information about our businesses. Voice and smart search are becoming the new normal, and automated information management across digital or traditional channels is more vital than ever to the success of any business. Omni-channel knowledge management, driven by technology, provides better collaboration and a far more efficient exchange of information than traditional, manual approaches. Visualizing knowledge as a tangible business asset Digitized knowledge management is a powerful tool because it helps organizations see information as a tangible business asset rather than an intangible byproduct. This perspective helps organizations identify their strongest assets - what they know best - and leverage them to meet business needs more effectively and efficiently. Consider the hostile exit of a partner or a vendor. With traditional knowledge management systems, the business would likely struggle to get control of the situation. Finding a new partner can be a nightmare, especially with all the information lost with the termination of the partnership. But a digital organization would have all the essential information digitized, standardized, and stored in an accessible format, so that even in such an undesirable moment the organization could act guickly and resolve the situation. Having industry knowledge readily available would also allow the organization to continuously assess new vendors and partners, and likely find a better deal or a stronger partnership than the one they lost. Structured knowledge: Your highway to becoming truly digital Organizations have been digitizing information for decades - scanning

documents and storing them in shared folders. This saves time and money, but it doesn't help organizations monetize that information. This unstructured information, stored in multiple formats and locations, is difficult to access and leverage without significant human intervention. To be of any value, industry knowledge needs to highlight new opportunities and insights, enhance customer experience and optimize operations. This is no longer a luxury but existential tool in a highly competitive and digital word. Before businesses can take advantage of strategic opportunities, knowledge has to be managed effectively. Knowledge related to any specific skill, task, process, methodology, or approach, needs to be captured in a digital format that is easy to accesses and engage. This describes structured knowledge, which enables businesses to manipulate relevant information leading to innovative analytics, new opportunities for improvement, and transformational solutions. For example, organizations can easily access and learn from past mistakes and successes, or use structured knowledge data to train intelligent systems to further enhance business processes. With structured knowledge, enterprises can focus on developing the precise competencies and skills needed and discourage obsolete information form creeping back into the system. Digital knowledge management continuously pushes individuals to innovate and drives organizational culture changes to adapt to evolving business demands. Other business benefits of a digitized knowledge management system include: Knowledge management platforms: The way forward For a business to be "future-proof" it needs a secure, technologically agnostic, user-friendly platform in place to manage all critical business information. One such platform is Wipro Harmony, a SaaSbased platform for digitizing, managing and leveraging process knowledge to accelerate digital transformation journeys for businesses, captives or global shared services. Already, the platform has supported many multinational organizations along their digital journeys, helping them plan and implement strategies, simplify, standardize and harmonize processes across business or shared services centers, often across the globe. Harmony allows businesses to identify automation opportunities across business units thereby shortening their automation and digital journeys. In doing so, organizations develop golden processes that become key drivers of digital transformation for their businesses. For more information on how knowledge management can help your business go digital, contact us. Industry: ThangaPrakash Kanagaraj Associate Vice President, Product head - Wipro Harmony ThangaPrakash Kanagaraj is Associate Vice President, Product head - Wipro Harmony. Holding Master's degree in Information technology and also a qualified CMA. More than 22 years of experience across business process solution design, delivery, transformation and automation leveraging technology. Currently managing Wipro Harmony SAAS based Wipro IP with 20+ clients with user base across 60+ countries. Earlier worked with GE, Fidelity and TCS. Despite the long-standing history of private pension plans, superannuation was introduced to Australians over 20 years ago to help them support their retirement in a financially viable way. Fast forward to 2020; it is now a A\$3T business. Over the last two decades, superannuation has become complex, highly regulated, and vulnerable to scandals. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital

transformation successfully than organizations that just neglected culture. www.wipro.com/blogs/mohandas-udyavar/ ----- Contact Wipro Blogs By Author Wipro launches Automotive Connected Services Studio in collaboration with AWS Launchpad Impact of COVID-19 on the Automotive Industry Please fill the required details to access the content Mohandas Udyavar Mohandas Udyavar CTO, Automotive Mohan has more than 20 years of consulting experience with comprehensive business/technical skill set in program management, architecture, and business process reengineering. His specialties include Digital Transformation, Cloud Strategy, Enterprise Architecture, Identity and Access Management, Enterprise Integration, Service Oriented Architecture, and Business Process Management. We are living in a connected world and customers are looking for a vehicle which will make their travel experience safe, joyful and productive. Customers are also expecting the car features to keep improving with Over the Air (OTA) updates. These are challenging times for the automotive industry, one of the most powerful drivers of the global economy that employs more than 50 million people.

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# Impact of COVID-19 on the Automotive Industry

---- Arcticle source ---- https://www.wipro.com/blogs/mohandas-udyavar/ impact-of-covid-19-on-the-automotive-industry/ ---- About the Authors Contact Wipro Related Blogs Partner Automation is Key to Maximizing the Manufacturing Ecosystem Three Ways to Optimize the Supply Chain to Become Customer Centric Five ways manufacturing companies can boost profitability Please fill the required details to access the content Impact of COVID-19 on the Automotive Industry April | 2020 Figure 1: March units sold in North America by major automakers. With a large number of other industries, such as steel and logistics, dependent on the automotive industry, the slowdown in auto sales due to COVID-19 is creating quite a ripple effect. Even after businesses reopen, social distancing will continue; therefore, the auto industry will need to adapt to new ways of working. With declining demand in view, automotive companies are examining their strategies and operational plans for the post-COVID-19 world (see Figure 2). The current priority is to enable a remote workforce where possible, reduce operational costs, and invest in digital technologies that keep customers engaged and provide financial relief. Auto manufacturers know that they have to continue funding CASE (Connected, Autonomous, Shared and Electric) innovations to stay ahead of their competitors and increase focus on cybersecurity as remote workplaces and collaborations have opened new threat vectors. Although Industry 4.0 initiatives may slow down in the near term, manufacturers realize its importance to create resilient supply chains and manufacturing operations in the future. Additionally, M&As and increased resource pooling will help organizations weather the storm. Figure 2: Post-COVID-19 strategy and operational plans. The Automotive Industry in a

VUCA World The current situation is classic Volatile, Uncertain, Complex and Ambiguous (VUCA), but the COVID-19 challenge is not a one-off disruption. In an interconnected global economy, similar disruptions will continue. Organizations need a playbook to help reduce the impact to business during a crisis, increase agility, and adapt to a new normal. Figure 3 shows a sample roadmap created using the VUCA framework. Figure 3: VUCA approach for automotive OEMs. During this extraordinary situation, Wipro has developed a playbook to support its customers, as shown in Figure 4. Figure 4: Wipro's rapid recovery solutions for automotive customers Figure 4. Our solutions can help our clients spend less and recover faster: The automotive industry is experiencing unprecedented challenges and uncertainty. Navigating unknowns, ambiguities, and disruptions is becoming the new normal. Developing a playbook to predict, respond, and adapt to these challenges is imperative for success. Wipro's IPled solutions, digital tools, and end-to-end integrated services can help clients overcome crisis and develop new ways of working. Industry: Mohandas Udyavar CTO, Automotive (mohandas.udyavar@wipro.com) Mohan has more than 20 years of consulting experience with comprehensive business/technical skill set in program management, architecture, and business process reengineering. His specialties include Digital Transformation, Cloud Strategy, Enterprise Architecture, Identity and Access Management, Enterprise Integration, Service Oriented Architecture, and Business Process Management. Krishna Rachapoody Consultant, Automotive (krishnarao.rachapoody@wipro.com) Krishna is a senior executive with more than 20 years of IT experience in Designing Solutions, Program Management, and Consulting. Krishna brings with him functional, technical and delivery experience from executing large programs, managing key pursuits, and designing and building software solutions in Manufacturing, Supply Chain, Connected Vehicle, Automotive BI, Dealer Systems, and O2C processes. Manufacturers were once many steps removed from their customers, with wholesalers and distributors providing a crucial link to sales. With the titanic shift that has occurred in business, only customer-centric companies will survive. Manufacturing companies are under pressure. Cost of raw materials is rising, while increased competition is driving down end user pricing. Salaries are rising at a level that manufacturing automation alone cannot absorb and the race to acquire talent is increasing. This forces manufacturing companies to find other ways 

#### Wipro launches Automotive Connected Services Studio in collaboration with AWS Launchpad

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Automation is Key to Maximizing the Manufacturing Ecosystem Three Ways to Optimize the Supply Chain to Become Customer Centric Five ways manufacturing companies can boost profitability Please fill the required details to access the content Wipro launches Automotive Connected Services Studio in collaboration with AWS Launchpad August | 2020 We are living in a connected world and customers are looking for a vehicle which will make their travel experience safe, joyful and productive. Customers are also expecting the car features to keep improving with Over the Air (OTA) updates. In the ID Power Initial Quality Survey, the OEMs have seen their ranking drop drastically based on the quality of their connected services. So automotive OEMs are now focusing on providing new connected experiences to their customers. To stay competitive the OEMs have to not only incubate new ideas but also accelerate the time to market, while keeping the costs low. Wipro's Connected Services Studio focuses on experimenting, codesigning, building, and launching value-driven solutions for our automotive customers. The studio has 550+ design professionals, full stack engineers and data scientists with Telematics and IoT implementation experience who follow an agile continuous value delivery model. The studio leverages our Designit® capabilities to design ownership experiences paired with our deep expertise in Product Engineering services building next generation Digital Cockpit, Car OS and ADAS capabilities. The studio builds on the investments made in our Connected Vehicle Platform AutoInsights and creates reusable service components which accelerate the development of new connected experiences for our customer. The platform leverages AWS Connected Vehicle Solutions and has a rich partner ecosystem. AWS Connected Vehicle Solutions is an enabler to quickly standup a Connected Vehicle Platform without committing to a massive infrastructure investment. This platform allows a secure connectivity between the car and the AWS cloud and has a framework to build a rich set of connected services features. Wipro AWS Launchpad has a comprehensive set of solutions that enables our customers to reimagine their AWS cloud journey and accelerates cloud adoption. Leveraging a highly automated and industrialized approach, it enables building modern telematics services, and deployment of a Cloud native DevOps environment. The physical studio also includes immersive customer experience zones, collaboration pods for ideating and developing next-generation solutions with hyper scalers and building futuristic workspaces. Wipro's AWS Launchpad encompasses resources from multiple streams like experience design, cloud infrastructure, microservices development, advanced analytics and machine learning, networking, security etc. that work closely to manage AWS development in a seamless fashion. The studio provides end to end services from research, design, build, launch and operate and has already developed 30+ connected services for our customers. The Connected Service Studio provides the following value for our customers Please reach out to us for more information and we can conduct a design workshop and jointly develop a business case for you. Industry: Mohan Udyavar CTO, Automotive (mohandas.udyavar@wipro.com) Mohan leads the Industry Solutions Group, Architecture and Cloud consulting for the Automotive vertical. Dr. Manish Govil General Manager & Global AWS Practice Head (manish.govil1@wipro.com) He is responsible for driving go-to-market solutions, competency, offerings, center of excellence, and delivery for AWSrelated services globally. Manufacturers were once many steps removed

from their customers, with wholesalers and distributors providing a crucial link to sales. With the titanic shift that has occurred in business, only customer-centric companies will survive. Manufacturing companies are under pressure. Cost of raw materials is rising, while increased competition is driving down end user pricing. Salaries are rising at a level that manufacturing automation alone cannot absorb and the race to acquire talent is increasing. This forces manufacturing companies to find other ways source ---- https://www.wipro.com/blogs/girish-jagajampi/ ---- Author's Posts Contact Wipro Please fill the required details to access the content Girish Jagajampi Girish Jagajampi Cloud Practice Lead, Cloud & Infrastructure Services, Wipro Ltd. Girish has more than 20 years of experience in the IT industry across software development, datacenter services, DC consolidation & transformations, virtualization and cloud services. He leads the engineering efforts to build and enhance cloud offerings and is focused on delivering solutions that define next-gen services. Connect with him at girish.jagajampi@wipro.com ================

# How managed multi-cloud services help create an industrialized approach

----- Arcticle source ----- https://www.wipro.com/blogs/girish-jagajampi/howmanaged-multi-cloud-services-help-create-an-industrialized-approach/ -----About The Author Contact Wipro Please fill the required details to access the content How managed multi-cloud services help create an industrialized approach April | 2021 Today's dynamic market conditions mandate a highly agile IT environment. Achieving agility calls for a shift in organizational culture and an innovative approach to transform the ways in which IT aligns to business needs. With cloud becoming the default means to achieve agility, every organization should ensure effective management of all IT non-cloud and cloud resources with equal focus. New capabilities such as PaaS, containers, cloud native services, DevOps, CI/CD, and SRE along with the need to utilize different operating models like private cloud, public cloud, and hybrid cloud further strengthen this environment. There are several ways in which cloud services can be provided - IaaS, PaaS, and SaaS; with an ever-increasing list of cloud service providers such as AWS, Google, IBM, Azure, Oracle, and Salesforce.com. Managed multicloud services are an engagement between customers and managed service providers (SPs) that involves overseeing of multiple clouds from different sources. The engagement can be two ways: managing clouds from different public cloud providers or managing enterprise private clouds and clouds from public cloud providers. Both these models have their unique complexities, while managing these multicloud environments requires a pragmatic approach. Every CSP, process governing bodies, security & compliance governing authorities, OEMs, ISVs, and standards defining councils provide their recommendations and guidelines. However, they are not always effectively implemented in day to day operations. Also, another challenging factor is

the increased complexity in these environments. Managed multicloud services aid enterprises in meeting critical business imperatives comprising growth, financial benchmarks, compliance and regulatory requirements. It can further help create agile environments that include restructuring the operational and governance models of designing, developing, deploying, and managing IT (cloud and non-cloud resources) across applications and infrastructure. With managed multicloud services, organizations can gain access to dedicated Centers of Excellence (CoE), labs, and innovative technologies such as edge computing or Infrastructure as Code (IaC) in order to ensure ongoing innovation. A seamless approach across the lifecycle of services can be created resulting in a digital services supply chain of cloud capabilities that optimizes consumption of resources while meeting critical KPIs and SLAs. Wipro's multi-cloud management platform, BoundaryLess Enterprise (BLE) helps organizations accelerate their transformation to cloud and acquire capabilities that can in turn continuously align business objectives and requirements with consumption of any type of IT resource. BLE uses industrialized solutions that include a mix of its own proprietary tools and those available through partnerships with cloud service providers. Customers are provisioned with a ready-to-use, plug-and-play IT services platform that can be easily consumed based on individual requirements and personas (e.g. IT, LOB, CXOs). Our Technology Spotlight talks about how managed multicloud services assist in creating an industrialized approach that links migration and modernization of IT to the cloud as well as managing all IT and cloud resources. To learn more about managed multicloud services, please download a free copy of the IDC report on Wipro's 'Managed Multicloud Services: Accelerating the Journey to Hybrid Cloud and Agile Business Operations' here. Enterprises will continue to counter organizational resistance and dated processes that could decelerate the creation of a seamless life cycle of service delivery, a critical aspect to meet key enterprise objectives. Managed SPs need to implement critical processes and robust governance that include multicloud management platforms and technologies. Managed SPs should be in a position to make any cloud service available that can cater to a specific objective, need and time. In a nutshell, the key objective of multicloud management platforms is to support all cloud providers, standardize IT, and ensure the speed at which value is generated. Managed multicloud services provide organizations with maximum opportunity to optimize costs as well as performance. Delivering efficiency in cloud is the secret for success and hence, a structured approach to address the complexity is essential. Wipro's BLE does just that in a very agile and plug-n-play model. Girish Jagajampi Cloud Practice Lead, Cloud & Infrastructure Services, Wipro Ltd. He has more than 20 years of experience in the IT industry varied across software development, data center services, data center consolidation & transformations, virtualization, and cloud services. He has represented Wipro in public forums and seminars as an evangelist to present points of view aligned to global trends. He leads the engineering efforts to build and enhance cloud offerings for CIS and is focused on delivering solutions that define next-gen services for Wipro. Reach out to him Arcticle source ---- https://www.wipro.com/blogs/bhavya-kapoor/ ---- Contact Wipro Blogs By Author Cloud Adoption Surges in Southeast Asia Benefiting Business and Beyond When it comes to inclusion, actions speak louder than

words Shifting Priorities: Reshaping the Workplace Post COVID Agility in the face of change: Responding to the threat of COVID-19 Please fill the required details to access the content Bhavya Kapoor Bhavya Kapoor Executive Director & Geo Head for Wipro ASEAN Bhavya is a seasoned Wipro leader who has expertise in business strategy, digital transformation, new revenue streams and partnership development. He also led Wipro's communications and manufacturing business in the Asia Pacific Japan region and has been a part of Wipro's leadership team in Asia Pacific Japan business. Bhavya is a strong proponent of diversity and localization. He can be reached at Bhavya.kapoor@wipro.com Between 2015 and 2019, the number of internet users in Southeast Asia increased... The Enabler Program by Microsoft is a program to increase employability for people with disabilities (PwDs) in the Asia-Pacific region, by partnering with six nonprofit organizations (NPOs) and 14 employers for the initial launch in five markets. Over the past few months, organizations have dealt with the impact of COVID-19 - from the plummeting economy to other severe business disruptions. Traditional work strategies were challenged, working from home has become the norm, and digital infrastructures were revamped to adjust to remote working requirements. As the COVID-19 threat gained momentum, countries in South-East Asia took strong steps to contain the spread of this deadly virus. =============

#### Agility in the face of change: Responding to the threat of COVID-19

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workers also created operational challenges. Morphing into a new work model The future of work was heading towards flexibility. Reports predicted that 42.5% of the global workforce would be mobile by 2022[ii]. By forcing companies to move to a remote work model almost overnight, COVID-19 has perhaps made remote work a new normal much sooner than anticipated. In this environment, Wipro ASEAN has worked relentlessly to support our customers and ensure seamless service, even while our teams shifted to a 100% remote work model - both onsite and offshore - in just over one week. We took rapid action to equip the team - enabling laptops, implementing required access and security protocols, mobilizing resources where needed, and doubling remote support - with zero escalations from clients. The 3 pillars of transformation Wipro continued operations and supported customers by focusing on 3 areas - customer delivery, strategic re-planning, and transformation to a new normal. The lessons from this pandemic will serve us well as we help clients recover. Covid-19 is neither the first threat to business nor the last, and organizations must aim to be resilient in the face of change. How are you adjusting to the new normal? Are you geared to streamline your business continuity plans and strategies? Leave your thoughts here. References [1] https://www.unescap.org/sites/default/files/ COVID19%20 Report ESCAP Presentation.pdf [2] https://medium.com/thecrossover-cast/the-drive-to-not-drive-whats-behind-the-remote-workrevolution-d9ee5c28dd99 Industry: Bhavya Kapoor Executive Director & Geo Head for Wipro ASEAN Bhavya is a seasoned Wipro leader who has expertise in business strategy, digital transformation, new revenue streams and partnership development. He also led Wipro's communications and manufacturing business in the Asia Pacific Japan region and has been a part of Wipro's leadership team in Asia Pacific Japan business. Bhavya is a strong proponent of diversity and localization. He can be reached at Bhavya.kapoor@wipro.com Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. ===============

## Shifting Priorities: Reshaping the Workplace Post COVID

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disruptions. Traditional work strategies were challenged, working from home has become the norm, and digital infrastructures were revamped to adjust to remote working requirements. Like many of our clients, Wipro was guick to adapt, shifting to a 100% work from home model for our employees in Southeast Asia. We managed this feat in just over a week by developing a robust business continuity plan focused around customer delivery, strategic re-planning, and transformation. Emerging stronger in the great reset Now that the initial surprise element surrounding COVID has settled and businesses are returning to normalcy, organizations in Southeast Asia must design strategies promoting the resumption of operations, safe re-opening of offices, and the management of changed employee/customer expectations. Southeast Asia has always held an affinity for in-person experiences. For many industries, regardless of the available technology, human interaction has been preferred: in-person classes for education, office working for business, and shopping in store for retail. Digital and virtual options were a convenient alternative -- but only when needed. In Southeast Asia, Wipro is developing future-ready workplace solutions through novel talent management techniques, revamped technology, and a renewed focus on employee engagement and wellbeing. As we do this, we're keeping four key areas of impact in mind: COVID-19 has disrupted the traditional way of working, leading to a more fluid and flexible digital world that requires more dependence on technology, innovation, and adaptability. Today, new opportunities emerging. The question is: How are you preparing your workplace and workforce for the future? Industry: Bhavya Kapoor Executive Director & Geo Head for Wipro ASEAN Bhavya is a seasoned Wipro leader who has expertise in business strategy, digital transformation, new revenue streams and partnership development. He also led Wipro's communications and manufacturing business in the Asia Pacific Japan region and has been a part of Wipro's leadership team in Asia Pacific Japan business. Bhavya is a strong proponent of diversity and localization. He can be reached at Bhavya.kapoor@wipro.com The Metaverse is collapsing the physical and virtual worlds to create a paradigm shift in interactions between customers, suppliers, partners, employers and employees. It's every company's worst nightmare. In 2019, a global metals manufacturer experienced a ransom-ware attack in which hackers seized and encrypted its computer files, then demanded payment to unlock them. Agility as a concept has been discussed for years, though the competitive advantage of being more agile came into sharp focus in 2020. The increased pace of change, rapidly evolving customer needs, compressed timeframes for responding all of these and more drove the topic back onto every Board agenda.

## When it comes to inclusion, actions speak louder than words

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Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content When it comes to inclusion, actions speak louder than words October | 2020 The Enabler Program by Microsoft is a program to increase employability for people with disabilities (PwDs) in the Asia-Pacific region, by partnering with six non-profit organizations (NPOs) and 14 employers for the initial launch in five markets. The program aims to pioneer disability-inclusive workplaces across the region by removing barriers for a more diverse workforce. Wipro has embarked on the program in Singapore, Malaysia, and Thailand. At Wipro, inclusion has always been about integrating diversity effortlessly into everyday working, and celebrating diverse ideas and experiences at the workplace, guided and supported by our 'Spirit of Wipro' values. We celebrate and learn from diverse ideas, backgrounds, perspectives, and experiences. As a company, we've been committed to inclusive growth and the latest milestone in this journey has been our partnership with the Microsoft Enabler Program to drive inclusive hiring across Singapore, Thailand, and Malaysia. This first-of-its-kind initiative will specifically focus on improving accessibility and increasing employability of persons with disabilities (PwD). Wipro has been hiring employees with disabilities for over a decade now. We've built a six-pronged approach for holistic growth of PwDs. These six pillars include: In addition, we have several programs running to improve the overall I&D quotient at Wipro with initiatives focused on gender and ethnic diversity and our commitment to hiring local within the communities that we operate in. At Wipro, we place our talent above everything else to ensure that the best potential in any individual doesn't go unrecognized. I encourage you to read more about the Enabler Program here. I am excited about this inclusive culture we are building in ASEAN and globally, and look forward to your ideas and efforts to make this program a success. References i https://www.pwc.in/assets/ pdfs/publications/2016/making-diversity-work-key-trends-and-practices-inthe-indian-it-bpm-industry.pdf Industry: Bhavya Kapoor Executive Director & Geo Head for Wipro ASEAN Bhavya is a seasoned Wipro leader who has expertise in business strategy, digital transformation, new revenue streams and partnership development. He also led Wipro's communications and manufacturing business in the Asia Pacific Japan region and has been a part of Wipro's leadership team in Asia Pacific Japan business. Bhavya is a strong proponent of diversity and localization. He can be reached at Bhavya.kapoor@wipro.com Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern 

# Cloud Adoption Surges in Southeast Asia Benefiting Business and Beyond

----- Arcticle source ----- https://www.wipro.com/blogs/bhavya-kapoor/cloudadoption-surges-in-southeast-asia-benefiting-business-and-beyond/ ----- About the Author Contact Wipro Please fill the required details to access the content Cloud Adoption Surges in Southeast Asia Benefiting Business and Beyond August | 2021 Between 2015 and 2019, the number of internet users in Southeast Asia increased by 100 million, nearly 40%. As a result, these emerging economies are now more welcoming of digital technologies such as 5G, artificial intelligence (AI), and the internet of things (IoT) in enterprises like e-commerce, banking, and public services. Cloud adoption is also on the rise to enable this digital wave. IDC estimates the cloud computing market in Southeast Asia will reach \$40.32 billion by 2025. According to ISG, cloud services were a record 85% of the IT and business services market in Asia-Pacific in the first quarter of 2021. What's driving cloud adoption? In recent years, countries in Southeast Asia have been working on expanding their digital footprint, becoming more data-driven, higher-performing, and better connected. The pandemic increased pressure on businesses to adopt new technology to support things like remote work, e-commerce, and supply chain management. Along with the much-touted benefits of faster time to market, lower costs, and more resilient infrastructure, the cloud brings a unique value proposition to companies in Asia: an opportunity to scale and leapfrog an entire generation of technology. Populous countries in the region such as Indonesia and Bangladesh have found scalability a big obstacle from an infrastructure perspective. Cloud has helped them overcome this hurdle. During the pandemic, use of cloud-based communication solutions like Microsoft Teams and Cisco Webex soared, helping hundreds of thousands of users stay connected. Most of the technology infrastructure deployed in the region is due for a refresh, and the appeal of simpler, easier ways to implement cloud solutions is strong. Organizations are looking at cloud as a way to elimate technical debt while unlocking opportunities for new business lines and revenue growth driven by innovation. Companies are skipping the managed services and outsourcing phase of computing and moving directly to the public cloud, in a bid to reduce infrastructure and technical costs and effort. The rise of hybrid work is also generating significant interest in the adoption of hybrid cloud. Recognizing the opportunity, several major cloud service providers including Microsoft Azure, Amazon Web Services (AWS), and Google have made significant investments in setting up cloud data centers. Even OTT players like Facebook have joined the fray, investing \$1 billion in a data center set to open in Singapore in 2022. Wipro has also announced the launch of Wipro FullStride Cloud Services and its commitment to invest \$1 billion in cloud technologies, capabilities, acquisitions, and partnerships over the next three years. This investment will enable us to help our clients in Southeast Asia adopt cloud-native architectures and technologies. Wipro

FullStride Cloud Services will work with clients in the region to better align business and IT with the cloud imperative, create significant business value, and increase competitive differentiation. It will also improve their business agility, resilience, and significantly optimize their technology investments in favor of change and innovation. Overcoming region-specific challenges While cloud is gaining popularity in Southeast Asia, challenges to adoption remain, two in particular: data residency laws and a talent crunch. International large-scale security incidents have increased concerns about data security. Demands for more stringent data encryption and privacy laws are on the rise, especially for cloud because it is so far removed from traditional — and therefore more trusted — models. However, despite cloud providers offering tools to encrypt data, it's the user's responsibility to specify what information to encrypt. This creates a major hurdle in new markets that are just warming up to the cloud ecosystem. Executives are often wary of adopting cloud solutions in fear they might be penalized for unknowingly violating data-sharing laws. However, these concerns over data offshoring are abating with major cloud service providers investing in local data centers, ensuring that data stays in the country. Growing interest in enterprise cloud adotion is also triggering policy changes around data residency. After regulations, the biggest hurdle that companies face is the availability of local talent that is trained in line with industry standards. For instance, in areas like multi-hybrid cloud and security, technology has evolved at a rate with which skill-building isn't keeping up. According to Gartner, this talent gap is the second most disruptive pressure for companies in the region. Companies and technology providers are now working with local educational institutes to build talent. Wipro, for example, is training university students in cloud technology and hiring locally to build cloud talent. We are also bringing in practices like Agile and DevOps that are not commonplace in the region but are indispensable to increasingly digital workplaces. Beyond business: Cloud's full potential A study by Oxford Economics suggests that the recent investments in cloud computing may have wide-reaching benefits for the region. The social impact of cloud adoption for financial inclusion, connectivity, and healthcare, for example, could far outweigh the business benefits. Rising demand for cloud computing resources and data centers have already increased demand for local talent. Onboarding, upskilling, and training this talent is expected to also have far-reaching benefits for the socioeconomic climate in the region. The ongoing digital developments in Southeast Asia highlight the transformative potential in cloud computing. The cloud is a powerful foundational technology that enables users to build more flexible, intelligent business systems. It's also a catalyst for further development throughout a business, across industries, and in the surrounding communities. This region is still in the early stages of its digital transformation journey, but its investments in cloud technology are building a momentum that seems likely to carry them well into the future. Bhavya Kapoor Managing Director -South East Asia Bhavya is a seasoned Wipro leader who has expertise in business strategy, digital transformation, new revenue streams and partnership development. Bhavya leads Wipro's business in east of Asia. He led Wipro's communications and manufacturing business in the Asia Pacific Japan region before leading Wipro's East Asia business. He is a part of Wipro's leadership team in APMEA (Asia pacific Middle East, Africa & India) business. Bhavya is a strong proponent of diversity and localization.

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Top 4 Open Source Security Myths Debunked Please fill the required details
to access the content Padmalav Sahoo Padmalav Sahoo Open Source
Presales Architect, CTO Office, Wipro Limited. Padmalav Sahoo is an open
source enthusiast and has worked extensively in the area of enterprise
application development and digital transformation projects across verticals.
His major focus areas are cloud native app development using micro
services architecture, application containerization, etc. Industries are
attracted to adopting open source for a variety of reasons including, but not
limited to, cost optimization, faster innovation and improved code quality.

### Top 4 Open Source Security

#### **Myths Debunked**

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architecture, application containerization, etc. The world is leveraging open source to drive innovation. But, what to do if you can't open source? Inner source. Here's how companies' relationships with their customers, workforces, and supply chains will change as they adapt holistically to the new normal post-COVID. Several consumer and business trends will converge to shape the post-pandemic business world, but agility and digital Arcticle source ---- https://www.wipro.com/blogs/raj-gaikwad/ ---- Contact Wipro Blogs By Author Convenience as a Service: A Lifeline for Ride-Hailing Companies Amid COVID-19 Crisis and Beyond Please fill the required details to access the content Raj Gaikwad Raj Gaikwad Solutions Manager for Consumer Business Unit at Digital Operations and Platforms in Wipro Raj Gaikwad is a Solutions Manager for Consumer Business Unit at Digital Operations and Platforms in Wipro. He has more than 14 years of diverse experience working in the outsourcing industry and specializes in creating winning solutions for clients in Travel, Hospitality and Public Sector vertical. Ride hailing in EU and US cities is down 80% since the beginning of official COVID-19 restrictions. ==============

### Convenience as a Service: A Lifeline

# for Ride-Hailing Companies Amid COVID-19 Crisis and Beyond

----- Arcticle source ----- https://www.wipro.com/blogs/raj-gaikwad/ convenience-as-a-service-a-lifeline-for-ride-hailing-companies-amid-covid-19crisis-and-beyond/ ---- About the Author Contact Wipro Related Blogs Five imperatives for airline industry survival - and revival -post COVID-19 Please fill the required details to access the content Convenience as a Service: A Lifeline for Ride-Hailing Companies Amid COVID-19 Crisis and Beyond May | 2020 A high percentage of the global population is stranded at home under a lockdown. Most industries are badly affected and global economies have slowed down. Severe restrictions have brought nearly all travel to a standstill. It's no surprise that Travel, Hospitality, and Ride-Hailing industries are the hardest hit by the COVID-19 crisis. Baring a few examples, most of the ride-hailing companies depend on the transit of people for their revenue stream, and movement restrictions globally have become a stress test for the sector to manage their OpEx. Some of the key factors that have impacted the ride-hailing economy are: The impact has been a multi-layered one for the sector, from laying off internal employees, temporarily suspending driver contracts, to off-loading business portfolios in an effort to generate cash, and exiting from geographies that may see an L shaped recovery. What the future looks like The road ahead will not be limited to coping up with the current crisis and its impact - the industry will have to look at the situation from a futuristic perspective. The segment will

see a slower 'business as usual' phase due to travelers' lack of confidence in using ride-share even post COVID. Some of the challenges that the ridehailing industry will have to address are: To negate the immediate impact and to sustain cash flows, ride-hailing companies are looking at diversifying their lines of business, with the leaders already having a foot in the door in the food delivery business. They are using the opportunity to expand their portfolio, and entering into the last mile delivery of essentials by onboarding corner shops and forming tie-ups with e-commerce platforms. Some of the measures or developments that will address the three main operational parameters. i.e. new revenue streams, change in policy and regulations, and driver-partner fulfillment for ride-hailing will be: Reinventing is the key While the technology companies behind the ride-hailing economy have always been prompt and proactive, and living truly by their reputation of being disruptors, the challenge they face is not being profitable even in 'business as usual' scenarios. Most companies are in an infant phase with an average tenure of not more than 3-4 years, facing increasing pressure from investors. The road to recovery is a 'U' curve for the ride-hailing economy. Organizations need to relook their business strategies from an outside-in perspective by addressing the core business operations' needs. They need to rebrand themselves as 'Convenience as a Service' providers by expanding their business portfolios through services that touch the consumer's changing needs. It's time they also revalidate their efforts on non-core business support functions. What that means is, they should look at offloading non-core business KPIs to 3rd party specialist service providers through long term strategic partnerships. Only then, the journey to being 'profitable' will be less bumpy for the ride-hailing economy. Industry: Raj Gaikwad Solutions Manager for Consumer Business Unit at Digital Operations and Platforms in Wipro Raj Gaikwad is a Solutions Manager for Consumer Business Unit at Digital Operations and Platforms in Wipro. He has more than 14 years of diverse experience working in the outsourcing industry and specializes in creating winning solutions for clients in Travel, Hospitality and Public Sector vertical. Up until the unprecedented spread of COVID-19, the Airlines industry was recording a steady growth in passenger www.wipro.com/blogs/lakshmi-hariharasubramanian/ ----- Contact Wipro Blogs By Author Simplifying year-end payroll processing in the US with Oracle HCM Cloud Please fill the required details to access the content Lakshmi Hariharasubramanian Lakshmi Hariharasubramanian Oracle HCM Cloud Consultant, Cloud Enterprise Platforms, Wipro Limited. Lakshmi has 10 years of IT experience in Oracle EBS Consulting, Cloud HCM Consulting, Implementations and Application Upgrade. She is a certified Oracle Payroll Cloud Implementation Specialist. Lakshmi has been part of Oracle HCM Cloud implementations in the US geo. One of the primary goals for every organization is to manage year-end payroll processing without a hitch.

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# Simplifying year-end payroll processing in the US with Oracle HCM Cloud

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manner. Oracle Cloud HCM offers multiple payroll balance reports and W2 reports. Businesses need to ensure the W2 reports follow the other payroll balance reports. Reconciliation of these reports is a cumbersome process because of the varied nature of these reports. They take up an inordinate amount of time. In response to the problem, Wipro has built a custom solution that converts Oracle W2/balance reports into a user-friendly format, making the reconciliation process smooth and simple. Year-end payroll processing is no longer an anxiety-inducing exercise for users of Oracle Cloud HCM who combine it with Wipro's solution. Industry: Lakshmi Hariharasubramanian Oracle HCM Cloud Consultant, Cloud Enterprise Platforms, Wipro Limited. Lakshmi has 10 years of IT experience in Oracle EBS Consulting, Cloud HCM Consulting, Implementations and Application Upgrade. She is a certified Oracle Payroll Cloud Implementation Specialist. Lakshmi has been part of Oracle HCM Cloud implementations in the US geo. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/rahul-banerjee/ ---- Contact Wipro Blogs By Author A crisis without whom to blame [Crisis sin culpables] Please fill the required details to access the content Rahul Banerjee Rahul Banerjee Partner and Business Head for Wipro Digital (LATAM) Rahul has worked with customers globally across North America, Latin America and Europe to implement business transformation strategies leveraging leading edge technologies. His approach to implementing any kind of transformation is centered around the customer and the desired outcomes. He has led engagements across Telecom, Financial Services and worked with the UNSPCS on implementing supply chain standards globally. Rahul earned a degree in Business Management from Wharton School at the University of Pennsylvania. He earned his Master's degree in Information Science at the Birla Institute of Technology & Science. His senior thesis on the complexities of implementing a reverse phased coupler was published in a leading academic journal. When I played soccer in high school, my most hated practice session was running the mile within 5 minutes. ==============

#### A crisis without culprits

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most hated practice session was running the mile within 5 minutes. I was a sprinter and worked in short bursts and 400 meters (one lap around the track) was about 200 meters beyond what I could sustainably run at max speed (forget a mile!). I always heavily faded towards the end, thereby letting my teammates down. I had to pace myself, accepting that I would fall behind early to conserve energy. It was only after I fired up the afterburners at the halfway mark that we started getting more competitive. Cut to present day. I have had the opportunity to talk to several of our customers in Mexico, Colombia and Brazil over the past 2 months to ascertain what they thought would be the long-lasting impact of this crisis that none of us planned for? According to one report, massive reduction in CAPEX spend is estimated in the coming years across LATAM markets. A prominent executive remarked, "The crisis made us do things at a time that we could not do in years of digital transformation." ["La crisis nos hizo hacer cosas en un momento que no podríamos hacer en años de transformación digital."] Work from home - check, digital platforms - check, e-commerce-based sales - check. Can we continue to transform and adapt quickly? - hmmm ... The biggest question was, if this is the way we have to continue for a while, how do you make teams collaborate to build software and drive uniformity in the way they work? What are the organization's afterburners? Culturally, Latin America has teams that are high-touch and work locally. With this new way of working, should we give up on our high-touch that is the genesis of innovation and creating applications that are core to our competitive advantage? The right answer lies in changing the ways of working to replicate in-person, close collaboration in the remote ways of working. Agile methodologies, remote testing and organization-wide coaching are key takeaways that our survey results in 2019 presented. Digital platforms are now mature enough to be able to drive this type of collaboration across regions and languages. With infrastructure available to sustain voice and data globally, corporations can glean the benefits of globalization and access to resources or capability - Virtually! In this journey to normalcy, I feel we're at the 3/4 mile mark. By early-July, the vast majority of us should be free again. We're tired and may have started off too fast, but we need to muster up our remaining energy to finish strong. I encourage all corporations to use the month of May and June to work extra hard. , I know this work to force Digital transformation for all our employees will drive positive results. Industry: Rahul Banerjee Partner and Business Head for Wipro Digital (LATAM) Rahul has worked with customers globally across North America. Latin America and Europe to implement business transformation strategies leveraging leading edge technologies. His approach to implementing any kind of transformation is centered around the customer and the desired outcomes. He has led engagements across Telecom, Financial Services and worked with the UNSPCS on implementing supply chain standards globally. Rahul earned a degree in Business Management from Wharton School at the University of Pennsylvania. He earned his Master's degree in Information Science at the Birla Institute of Technology & Science. His senior thesis on the complexities of implementing a reverse phased coupler was published in a leading academic journal. Despite the long-standing history of private pension plans, superannuation was introduced to Australians over 20 years ago to help them support their retirement in a financially viable way. Fast forward to 2020; it is now a A\$3T business. Over the last two decades, superannuation has become complex, highly regulated, and vulnerable to

scandals. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just neglected culture.

# Creating an omni-channel retail experience with Oracle NetSuite

---- Arcticle source ---- https://www.wipro.com/blogs/santhosh-kumar-s/ creating-an-omni-channel-retail-experience-with-oracle-netsuite/ ----- About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Creating an omni-channel retail experience with Oracle NetSuite June | 2020 Every retailer today wants to provide the customer experience that large online marketplaces are known for. But there is a more compelling reason to mimic them: Customer expectations are being set by these online retail giants and those who can't match it struggle to grow their business. For these retailers, there is good news. Oracle NetSuite, the cloud-based commerce-ready ERP, fits into the plans of any mid-sized retailer and provides a similar experience. Best of all, retailers can also plug into almost any online marketplace to sell their products using Oracle NetSuite. Customer experience in the retail industry has become unimaginably sophisticated in the last 10 years. Today, customers have access to vast amounts of real-time information delivered by applications, social media, and websites. They do their research and know exactly when they can strike a bargain. Differentiation such as product selection and promotions are not as effective as they once were. This is because products, prices, and offers can be instantly matched by competition. The pressure this has put on retailers is driving them to look for solutions. The inability of retailers to meet customer expectations has its roots in the fact that ERP, CRM and e-commerce have been implemented with best-in-class solutions without putting too much thought behind integrating these disparate systems. Result: Product and customer data is spread across in-store POS,

in-store applications used by retail executives to access product information, loyalty systems, contact centers and kiosks. These systems must be integrated to fulfil orders and manage customer interaction. Without this, the seamless omni-channel experience that customers expect cannot be delivered. Today, consumers can conveniently browse on their mobiles or desktops, shop from anywhere (including a kiosk), make payments using a variety of methods, pick up their delivery anywhere, and ensure hassle-free returns. They can interact seamlessly with retailers on instant messengers. email, text, and chat. Store executives too can look up near-by stores for product availability, raise an order, and have it delivered so customers are not disappointed by the lack of inventory. Oracle NetSuite resolves these challenges and provides a smooth omni-channel experience that customers expect. It delivers a 3600 view of the customer, products (availability, vendors, inventory, product information), and orders from customers. It stitches together the entire experience, from order to fulfilment and returns, showing the delivery status at each stage. The information is transparent for the customer too, leading to exceptionally good experiences and increased loyalty. The key is to use the expertise of a technology provider that can leverage NetSuite to build a unified platform - fully integrated with other products and solutions. As a global strategic partner for Oracle NetSuite, Wipro has the expertise for flawless NetSuite implementation. In our experience, once the implementation is complete, sales show an uptick and customer satisfaction levels rise. Customers are delighted—they have the same experience that leading marketplaces have set benchmarks for. Industry: Santhosh Kumar S Practice Head, Oracle NetSuite, Wipro Limited Santhosh has more than 20 years of experience in the IT industry. He has been involved in a wide range of consulting and transformation engagements, managed and led large NetSuite Implementations for different verticals. Santhosh currently heads the NetSuite Practice at Wipro. He can be reached at Sankara.kumar@wipro.com. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

============================----- Arcticle source ----- https:// www.wipro.com/blogs/ramesh-nagarajan/ ----- Contact Wipro Blogs By Author The cloud & the new normal Please fill the required details to access the content Ramesh Nagarajan Ramesh Nagarajan Senior Vice President, Cloud Services, Wipro Ltd. Ramesh Nagarajan is a Senior Vice President and Head of Cloud Services, one of the foundational services at Wipro. In this role, he is responsible for defining and executing Wipro's Cloud Services business strategy, steering partnerships and joint go-to-market alliances with cloud service providers, and leading market-positioning initiatives. Prior to this role, Ramesh was the COO for the Global Infrastructure Division of Wipro, overseeing the customer delivery and operations, and also was the Chief Information Officer (CIO) for Wipro Limited. He was responsible for enterprise-wide information systems strategy and application development, framing surrounding policies and practices, information security, and risk

#### The cloud & the new normal

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integral not only for delivery, but also for all functions of organizations and their clients. Talent acquisition and onboarding have also shifted amid these changes. To get critical projects moving quickly, platforms like Topcoder with its 10 million-strong community — can help companies find talent and deploy them using a crowdsourced model. Wipro's Talent as a Service (TaaS) offering is also available to help enterprises implement remote collaboration and develop new ways of getting digital work done. Digital contact centers Almost 90% of companies depend on on-premise call centers for customer engagement. Simultaneously, companies offering travel, financial services, and more are experiencing massive call volume increases they can't handle. For example, travelers calling a Canadian airline experienced wait times reaching 10 hours. COVID-19 is a wake-up call for companies avoiding digital contact center solutions. The future of AI-supported, digitally optimized contact centers with cloud-based communication suddenly feels like much more of a current reality. 2. The great shift: From physical to digital Our inability to interact with customers in person has caused several industries to rethink their business models, basing them on the cloud. Industries such as education and healthcare have quickly adopted cloudbased digital channels to continue delivering their services. For example, Teladoc — a telemedicine company based in the U.S. — has seen a 50% surge in demand in just a week. Similarly, the adoption of EdTech is booming with a surge in demand for videoconferencing tools. Now is a great time for businesses to reimagine their services digitally so they can thrive in the new normal. 3. Supply chain disruption Lockdown and transportation restrictions have guickly revealed the vulnerabilities of our global supply chain. Following this crisis, it's expected that companies will revise their sourcing strategies, seeking alternate arrangements that reduce their reliance on specific supply networks. The World Economic Forum has called for "end-toend solutions across multiple supply eco-systems." The technology to create these ecosystems already exists, and the COVID-19 shock will likely spur more investments in these systems as leaders look for supply-chain intelligence solutions — cloudifying/SaaSifying supply chains. Cloud-based solutions will play a key role in streamlining demand planning, simplifying supply chains, and identifying alternative sourcing options — all at a lower TCO. 4. Financial freedom One of the biggest concerns business leaders have today is to balance their financials. To maintain working capital, businesses are looking for ways to generate liquid cash through costreduction measures, as well as selling or leasing their assets. Managing large data centers (DCs) and bearing their running costs are expenses businesses can do without. Moving to the cloud can help them optimize their IT costs while also generating cash by opting for DC exit programs. Additionally, moving ITOps to the cloud (ITOps as a Service) can also help businesses respond quickly to the latest tech or market changes and shift workloads to suit business and industry needs. 5. Increased security and compliance Cybersecurity is an ever-evolving landscape. With workforces going remote, threats have escalated significantly. And because the economic downturn has led to an increase in cybercrime, CIOs are looking to boost their security. A recent Adobe survey found that 7 in 10 of CIOs will be making additional financial investments in cybersecurity. After all, the cost of a breach is much higher than investing in the first place. The cloud can help strengthen an organization's cybersecurity posture while staving compliant, especially in the face of a crisis. Business in the new normal A lot

has changed for businesses in response to COVID-19. Although uncertainty will cause a slowdown in some customer organizations, others will continue to invest in technology to survive and thrive today and in a post-COVID-19 world. New business models, methods for optimizing resource utilization, and strategies for staying competitive all require IT investments. We will see cloud-based technologies adopted at an accelerated velocity, unlocking the next wave of cost savings, driving resiliency, improving customer experience, and increasing new product development. In every adversity, there is an opportunity. This is not the time to pull back and wait for the ripples to settle. This is the time to go forward, seize the day, and leverage the cloud. How are you going forward into the current economic landscape and beyond? We're here to help. Industry: Ramesh Nagarajan Senior Vice President, Cloud Services, Wipro Ltd. Ramesh Nagarajan is a Senior Vice President and Head of Cloud Services, one of the foundational services at Wipro. In this role, he is responsible for defining and executing Wipro's Cloud Services business strategy, steering partnerships and joint go-tomarket alliances with cloud service providers, and leading marketpositioning initiatives. Prior to this role, Ramesh was the COO for the Global Infrastructure Division of Wipro, overseeing the customer delivery and operations, and also was the Chief Information Officer (CIO) for Wipro Limited. He was responsible for enterprise-wide information systems strategy and application development, framing surrounding policies and practices, information security, and risk management for the enterprise. Ramesh served as an expat in GE Medical Systems, USA and Japan, for over a decade, developing systems software for medical devices and programmanaging software development for large medical devices. He returned to the Global IT Services Business of Wipro in October 2000. He has earlier held various leadership roles at Wipro, notably the Global Head of Insurance Vertical and Program Director portfolio for a large systems integration program, and he led the team that conceptualized and implemented lean tenets in software lifecycle development. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business Arcticle source ---- https://www.wipro.com/blogs/meeta-bedi/ ---- Contact Wipro Blogs By Author How HR can be a differentiator during a pandemic Please fill the required details to access the content Meeta Bedi Meeta Bedi Wipro HR Services, DOP Meeta Bedi leads the people agenda at Wipro HR Services, DOP. Prior to her current role, she led Talent Transformation for DOP. With over 19 years' experience in the industry, she has led and contributed to teams across all HR functions including business HR, talent acquisition, and shared services. As the spread and severity of COVID-19 continues to grow, the guardian of employee welfare—Human Resources—is

## How HR can be a differentiator during a pandemic

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(especially those who aren't remote work-enabled). Team up with individuals to form groups to ensure proper engagement with everyone, especially those without a laptop or desktop. There can be weekly games and quizzes to keep them engaged. Invite leaders to team chats (virtual) or team meetings to share inspiring stories and boost colleague morale. Help employees feel productive. Work with business teams to set clear objectives. This will enable colleagues to determine their performance as they achieve organizational goals. Accomplishing tasks helps employees feel valued for their contribution and gives them a sense of purpose. Recognize even the smallest contributions. Partner with business teams to recognize exceptional employee performance. Recognition can be in the form of public acknowledgment, tokens of appreciation, and other personal learning and development opportunities. Virtual R&R sessions have seen a jump recently and act as an excellent motivator. Promote digital adoption. Today, digital is a lifeline and, in more ways than one, the primary mode of operation. From conducting online appraisals to talking about project deliverables via WebEx or any virtual mode of communication, leaders are focused on digital engagement. To maintain business continuity, HR can facilitate online transitions and virtual onboardings. Beyond business-centric meetings, team-connects that focus on fun and positivity should be organized. Stay vigilant for misconduct with employees. According to Gartner, this time is susceptible to employee misconduct. Ongoing uncertainty can increase the chance of employee misconduct by 33%. Hence, HR should work with managers to encourage whistleblowers to call out unethical behaviors. Remind colleagues about channels for reporting misconduct and strict measures in case of non-compliance. Encourage employees to learn from home. To recover from the after-effects of this pandemic, organizations are investing in learning. Compliance training and professional development can be completed digitally, remotely, and immediately. Encourage employees to use outside learning platforms, such as Udemy and UpGrad, to learn a new skill or polish an existing one. Replace your in-person training with online sessions to keep employees productive. Fun, bite-sized, and on the go learning was already ranking up in the new learning models, and it's only bound to get more popular. Look forward to a safe and successful tomorrow. The sudden outbreak of COVID-19 has pushed the world into unchartered territory. I would agree that uncertainty is palpable in these challenging times. However, take comfort that we are all in it together! Be grateful for what we have and count our blessings. Be more generous, more giving, more patient, and always kind. Celebrate the small wins. Cheerlead for our teams to deliver what they can with a smile. Listen to our people. Talk to them about their days. Also, record our learnings and share them with others. Throughout human history, people have counted on each other and triumphed over crisis together. Today's challenge is no different. Stay home and stay safe. Industry: Meeta Bedi Wipro HR Services, DOP Meeta Bedi leads the people agenda at Wipro HR Services, DOP. Prior to her current role, she led Talent Transformation for DOP. With over 19 years' experience in the industry, she has led and contributed to teams across all HR functions including business HR, talent acquisition, and shared services. Despite the long-standing history of private pension plans, superannuation was introduced to Australians over 20 years ago to help them support their retirement in a financially viable way. Fast forward to 2020; it is now a A\$3T business. Over the last two decades, superannuation has become complex,

highly regulated, and vulnerable to scandals. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just neglected www.wipro.com/blogs/agathian-sannasi/ ----- Contact Wipro Blogs By Author COVID -19 Disruptions: Transportation and Supply Chain Solutions Please fill the required details to access the content Agathian Sannasi Agathian Sannasi Senior Architect - Cloud Enterprise Platforms at Wipro Agathian Sannasi is a Senior Architect - Cloud Enterprise Platforms at Wipro, and is involved in a wide range of consulting and transformation assignments in Oracle Cloud Logistics. He has more than 20 years of industry experience, providing supply chain and solutions in Telecom, Hi-Tech & Manufacturing, Retail and 3PLs. Agathian manages the Oracle Logistics Cloud competency at Wipro and is a certified Oracle consultant. He can be reached at Agathian.sannasi@wipro.com to discuss more if interested about the solution. The COVID-19 pandemic has created multiple impacts on supply chain activities, which warrants quick re-engineering to meet the change in 

# COVID -19 Disruptions: Transportation and

#### **Supply Chain Solutions**

----- Arcticle source ----- https://www.wipro.com/blogs/agathian-sannasi/ covid-19-disruptions-transportation-and-supply-chain-solutions/ ----- About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content COVID -19 Disruptions: Transportation and Supply Chain Solutions June | 2020 The COVID-19 pandemic has created multiple impacts on supply chain activities, which warrants quick re-engineering to meet the change in demand. The key difference between typical disruptions such as hurricanes, earthquakes and COVID-19 are from regional vs global standpoint. Hence, redefining supply chain operations focusing on domestic opportunities becomes crucial. Transportation planning and execution plays a vital role in the SCM. Supporting supply chain focusing on domestic and international opportunities requires redefining transportation planning, carrier identification, and execution processes. The following are the key challenges to carrier identification, which directly influence the cost of goods sold (COGS) as well as on-time delivery, in turn affecting customer satisfaction. To overcome the above challenges, the customer has to relook at existing shipment transportation planning and execution. Transportation planning should relook at geography where inbound and outbound operations are performed or have been allowed to perform. Existing

planning and consolidation parameters need to be revisited to optimize consolidation, pooling and optimum floor space of the truck. This reengineering will help customers save freight cost during this difficult time and help to keep COGS in a healthy state. While the customer revisits their transportation planning to achieve consolidation and pooling, the success of this process lies in identifying the right carrier to execute. The pool of carriers presently engaged to support the supply chain may not be able to execute the refined transportation plan due to the non-availability of network, demanding higher price, reduced workforce etc. Hence, the carrier selection process should be relooked considering the following elements: In conclusion, COVID-19 warrants not only lifestyle changes but also a closer look at logistics operations to keep COGS, customer on-time delivery KPIs healthy. Industry: Agathian Sannasi Senior Architect - Cloud Enterprise Platforms at Wipro Agathian Sannasi is a Senior Architect -Cloud Enterprise Platforms at Wipro, and is involved in a wide range of consulting and transformation assignments in Oracle Cloud Logistics. He has more than 20 years of industry experience, providing supply chain and solutions in Telecom, Hi-Tech & Manufacturing, Retail and 3PLs. Agathian manages the Oracle Logistics Cloud competency at Wipro and is a certified Oracle consultant. He can be reached at Agathian.sannasi@wipro.com to discuss more if interested about the solution. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

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# How voucher match automation can lead to better payment terms with suppliers!

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manpower — the manufacturer is already ready for the future. Industry: Santosh Kumar Konakalla Lead Consultant, JDE, Wipro Limited Santosh Kumar Konakalla has over 14 years of deep understanding and experience in JDE ERP Finance and Distribution Modules. He is responsible for planning and implementing solutions and advising customers on ERP and Interface with 3rd party tools. Santosh has executed new solutions and helped customers successfully implement complex interfaces with JDE ERP. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/pradeep-rawat/ ---- Author's Posts Contact Wipro Please fill the required details to access the content Pradeep Rawat Pradeep Rawat Digital Sales Head for Insurance - EMEA, Wipro Pradeep is a business technologist with over 20 years of experience in the EMEA region across Life & Pensions, and Property & Casualty domains. He enables clients to realize business value through acceleration of their digital 

# Insurance - Renewed focus emerging from the pandemic

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innovation, but the industry as a whole needs to recalibrate and look at accelerating these efforts to serve their customer needs in the emerging new normal. We enable insurers with solutions across the four pillars of change to help them serve their customers with empathy and build future capabilities. Industry: Pradeep Rawat Digital Sales Head for Insurance -EMEA, Wipro Pradeep is a business technologist with over 20 years of experience in the EMEA region across Life & Pensions, and Property & Casualty domains. He enables clients to realize business value through acceleration of their digital journeys. The insurance industry has tradionally relied on data sources such as claims history to underwrite known and measurable risk. When a customer uploads an outdated version of forms or ones with missing signatures, the agents experience an interrupted workflow because they have to re-evaluate these forms for the accuracy of the seeded information. While P27 is expected to bring many efficiencies to the payments system in the Nordic region, participating banks will need to take deliberate steps to prepare for this new platform.

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#### Five Ways ServiceNow

## Can Build a True Digital Workplace

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organizations transitioning to remote working face immediate challenges, including: For companies to lead and manage new ways of working, it is crucial to scale an effective remote working model underpinned by the right enterprise solution. Here is how ServiceNow can help enable successful remote team management by: An enterprise-wide transformation solution is the first step to enable a true digital workplace and empower organizations to emerge stronger, more resilient, and flexible. ServiceNow is a platform that can not only enable the previously mentioned solutions but also enable a large number of organizational transformation solutions. Industry: In the evolving landscape of digital workplaces, efficient field service operations are critical in ensuring reduced downtime... appy employees usually stay at their jobs, frustrated workers often don't. Chief human resource officers (CHROs) tell us that the corporate leave of absence (LOA) process is one of the most common sources of employee frustration. Employees often rank their LOA experiences low on the satisfaction scale, using descriptors such as complicated, confusing, inconsistent, time consuming, and unresolved. In a world where business is evolving at the speed of thought, rapidly changing market conditions pose several challenges for enterprises across industries. www.wipro.com/blogs/venkat-jayaraman/ ---- Contact Wipro Blogs By Author Please fill the required details to access the content Venkat Jayaraman Venkat Jayaraman Distinguished Member of Technical Staff and Head of Client Solutions for the Industrial Engineering Team at Wipro Venkat Javaraman is a Distinguished Member of Technical Staff and Head of Client Solutions for the Industrial Engineering Team at Wipro. He is a technologist with over 41 patents filed/granted to his credit. He is a subject expert of Supply Chain and Logistics and has worked in multiple supply chain transformation programs for more than 10 years across the globe. With over 20 years of industry experience, his expertise has enabled the success of ----- Arcticle source ----- https://www.wipro.com/blogs/arundhoti-sonowal/ -----Contact Wipro Blogs By Author To Fight Fraud Airlines Now Need a Smart Hybrid Model Please fill the required details to access the content Arundhoti Sonowal Arundhoti Sonowal Solution Specialist with Consumer Business Unit at Wipro's Digital Operations and Platforms Arundhoti Sonowal is a Solution Specialist with Consumer Business Unit at Wipro's Digital Operations and Platforms. She is a chemical engineer with an MBA in Marketing & Strategy from IIM Kozhikode, India. The industry needs a proactive model powered by digital and human intelligence to monitor, manage and prevent frauds ================

## To Fight Fraud, Airlines Now Need a Smart Hybrid Model

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organizations should identify and cope with the challenges to cultural transformation? Please fill the required details to access the content To Fight Fraud Airlines Now Need a Smart Hybrid Model June | 2020 Fraud is a major pain point for airlines with huge cost implications. In spite of the revenue leakage, high penalty for chargebacks, and losses incurred through data theft and reputation damage, most of the airlines are not equipped to prevent and manage fraud robustly. They still use traditional rule-based legacy systems that fail to detect fraud completely, depend on manual reviews which makes the fraud detection process slow and, at times, ineffective. Moreover, with the traditional techniques, airlines fail to recover the loss incurred. For example, take the case of friendly fraud. When a card issuer submits a chargeback, the amount of the disputed transaction is deducted forcibly from an airline merchant's account in addition to any applicable fees. However, since this is typically done after the flight completion, airlines are unable to resell the seat. Similarly, in genuine cases, delay in the processing of the chargeback requests frustrate customers. To mitigate such instances and other frauds, airlines need to embrace digital technologies such as Machine Learning and Artificial Intelligence. Let's first understand the different types of fraud and the challenges airlines encounter when fighting these before we look at the relevant solution. Fraud scenario in the Airlines industry In 2019, the Airlines industry witnessed 61% increase in frauds - the highest compared to other sectors. Fraud can occur at any stage - be it booking, payment or even after sales. The most frequent frauds encountered by airlines include: Challenges Airlines encounter while fighting fraud incidents Mitigating fraud with a smart hybrid model - The combined power of human and artificial intelligence The smart hybrid model combines technology platforms and service layers along with analytics to manage fraud end-to-end. It brings together technology and humans where Machine Learning and Artificial Intelligence-driven platforms analyze and detect fraud, while highly skilled subject matter experts verify grey areas. This model offers a one-stop solution that can identify and process fraud across different channels starting from the consideration phase of booking to the feedback phase of a customer. This smart hybrid approach fights various types of fraud in the following ways: Mitigating fraud in web channel sales and loyalty account: Analyze the pattern of the customer starting from booking until he/she logs out, and identify anomalies in transactions in different channels. Mitigating friendly fraud/chargebacks: Identify and dispute bogus chargebacks across different channels and process refund or adjust loyalty awards. Mitigating agent fraud through sales transaction monitoring: Identify suspicious booking agents by analyzing sales transaction details, and then investigating each outlier case manually for fraud positive. Improving online reputation across social media: Recognize potential fraud by examining various social media channels and then resolve the issue by working with the concerned teams. Within social media, it is possible to promote customer engagement, participate in conversations, and address concerns. The smart hybrid approach not only follows the reactive mechanism to detect fraudulent activities but also involves a proactive method to prevent fraud using AI tools like Adaptive Behavioral Analytics. It ensures complete checking of transactions irrespective of the type and source, and reduction in false positives and turnaround time. Overall, airlines can reduce revenue loss and improve customer satisfaction by adopting this approach. Winning with

collaboration The smart hybrid model for mitigating fraud blends technology and people that allows airlines to block suspicious customers or agents, monitor fraudulent transactions, and minimize the penalty for chargeback rates. For an ultra-competitive and expanding airline business, this reduction in revenue loss and improvement in brand image and loyalty will enhance business growth as well as market share. Industry: Arundhoti Sonowal Solution Specialist with Consumer Business Unit at Wipro's Digital Operations and Platforms. She is a chemical engineer with an MBA in Marketing & Strategy from IIM Kozhikode, India. Despite the long-standing history of private pension plans, superannuation was introduced to Australians over 20 years ago to help them support their retirement in a financially viable way. Fast forward to 2020; it is now a A\$3T business. Over the last two decades, superannuation has become complex, highly regulated, and vulnerable to scandals. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just neglected www.wipro.com/blogs/rishi-reejhsinghani/ ---- Contact Wipro Blogs By Author Product information management: Enhancing customer experience in the omni channel consumer landscape Blockchain: Countering the counterfeit in the luxury retail and consumer goods industry What makes consumers tick in this new normal - Three key strategic objectives to address with SEO COVID-19 impact on consumer behavior and what retail and consumer brands can do Please fill the required details to access the content Rishi Reejhsinghani Rishi Reejhsinghani Deputy Manager, Presales and Solutions, Digital Operations & Platforms Rishi has business strategy consulting experience with expertise in business study, business process re-engineering solution designing, and project management for clients in the retail and consumer domain. Retail consumers today want to make informed decisions about their purchase Consumers often fall prey to buying counterfeit products, as there is little or no way of verifying their authenticity. While the traditional brick and mortar retailer might have been able to vet the validity of counterfeit products, ecommerce sites find it hard to track third party sellers who have easy access to consumers. The COVID-19 pandemic is an unprecedented humanitarian crisis that has not only disrupted life in general, but also businesses and consumer behavior patterns, creating a new normal in the retail and consumer business landscape. Before the COVID-19 pandemic disrupted life, businesses, and consumer behavior, brands relied on customer experience only to differentiate themselves among a sea of sameness.

## COVID-19 impact on consumer behavior and what retail and consumer brands can do

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solutions c. Transform from being reactive to proactive 4. Experience management: a. Concentration on CSAT and NPS b. Enhancing soft skills for creating brand equity c. Next-gen platforms enable immersive experience for customers, employees and stakeholders Going forward, enhancing customer experience and satisfactions will emerge as the strongest levers of success. A customer-centric approach makes brands SAFE in the new normal created by COVID-19 in the VUCA (Volatile, Uncertain, Complex, and Ambiguous) retail and consumer landscape. Industry: Rishi Reejhsinghani Deputy Manager, Presales and Solutions, Digital Operations & Platforms Rishi has 4 years of business strategy consulting experience having expertise in business study, business process re-engineering solution designing, and project management for clients in the retail and consumer domain. Despite the long-standing history of private pension plans, superannuation was introduced to Australians over 20 years ago to help them support their retirement in a financially viable way. Fast forward to 2020; it is now a A\$3T business. Over the last two decades, superannuation has become complex, highly regulated, and vulnerable to scandals. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just neglected culture.

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#### What makes consumers tick in this new normal - Three key strategic objectives to address with SEO

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reaches their website? The question that haunts all companies is how can they break through the clutter and connect with their customers. 'Search Engine Optimization' (SEO) is the answer to three strategic objectives: Brands need to find strategic partners that understand the digital retail and consumer behaviors and can leverage the best-in-class platforms, tools and methodologies to ensure increased organic search engine visibility and rankings. Consumer mobility, media consumption habits, supply chains, and budgets have gone through a sea change in the retail and consumer landscape. Brands that can pivot and transform in this environment will emerge as leaders with strong brand equity, a good understanding of their consumers and a strong cash flow. Industry: Rishi Reejhsinghani Deputy Manager, Presales and Solutions, Digital Operations & Platforms Rishi has 4 years of business strategy consulting experience having expertise in business study, business process re-engineering solution designing, and project management for clients in the retail and consumer domain. Despite the long-standing history of private pension plans, superannuation was introduced to Australians over 20 years ago to help them support their retirement in a financially viable way. Fast forward to 2020; it is now a A\$3T business. Over the last two decades, superannuation has become complex, highly regulated, and vulnerable to scandals. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just neglected 

# Blockchain: Countering the counterfeit in the luxury retail and consumer goods industry

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and CPG companies thwart counterfeiters. Blockchain is 'an open, distributed ledger that can record transactions between two parties efficiently and in a verifiable and permanent way'; simply put, it is a growing list of undeletable or unmodifiable records called blocks, linked using cryptography. Blockchain, by design, brings in transparency since it is accessible throughout the value chain. Traceability is assured since the records are permanent and cannot be deleted or modified - they can only be added and linked. A retail or consumer brand, such as a luxury fashion brand, can implement Blockchain by creating a digital twin where it assigns a digital identity to each product. Let us consider a pashmina shawl and its attributes - the origin of its ingredients (cashmere of Kashmir), styled by a well-known designer of Paris, high quality low micron of fiber, etc. All these product attributes can be tagged to the unique digital identity created. This, in turn, can be accessed via a mobile application by scanning a QR code or Near-Field Communication chip (NFC) placed on the product. The application can determine whether the item is registered on the brand's Blockchain. If the item is not registered on the Blockchain, it can be tracked and a potential counterfeit can be identified. If the item is registered on the Blockchain, the potential customer can access all the information attributed to the product through a public key. This puts transparency and information at the fingertips of the customer. So now, the customer can be confident that he/she is not a prey to the counterfeiter's trap! Blockchain also helps track the touch points in the value chain from where quality issues occur, as this is where counterfeits typically enter the system. The organizations can take appropriate remedial action proactively, thus ensuring that customers get a premium consistent quality product, thereby increasing customer satisfaction. Blockchain not only helps mitigate the risk of counterfeit in the primary market but also brings about authenticity and trust in the second hand luxury market as the transfer of ownership can be traced easily. Transparency also gives the customers more confidence, both in the primary and second hand markets. It creates unparalleled brand equity, thus justifying the premium charged for high-end luxury products. While companies spend a lot of effort time and money creating a luxury brand, counterfeits are like termites that eat into their revenues as well as reputation. Organizations can effectively address these challenges by mitigating the risk of counterfeit through digitalization, structured operations and efficient Blockchain platforms. Industry: Rishi Reejhsinghani Deputy Manager, Presales and Solutions, Digital Operations & Platforms Rishi has 4 years of business strategy consulting experience having expertise in business study, business process re-engineering solution designing, and project management for clients in the retail and consumer domain. Despite the long-standing history of private pension plans, superannuation was introduced to Australians over 20 years ago to help them support their retirement in a financially viable way. Fast forward to 2020; it is now a A\$3T business. Over the last two decades, superannuation has become complex, highly regulated, and vulnerable to scandals. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just neglected culture.

#### Product information management: Enhancing customer experience in the omni channel consumer landscape

---- Arcticle source ---- https://www.wipro.com/blogs/rishi-reejhsinghani/ product-information-management-enhancing-customer-experience-in-theomni-channel-consumer-landscape/ ----- About The Author Contact Wipro Please fill the required details to access the content Product information management: Enhancing customer experience in the omni channel consumer landscape April | 2021 Retail consumers today want to make informed decisions about their purchase. In addition, the increased product assortments and channels make managing product information in traditional systems such as spread sheets, PDF, ERP etc. a daunting task. Consumer experience is a critical aspect for the retail industry to gain and retain customer loyalty. To enhance consumer experience, the product information throughout the consumer journey and across channels should be complete, accurate, relevant, engaging, and consistent. Variation in content across different marketplaces for the same product, content quality issues, inconsistent formats, and missing attributes negatively influence a consumer's purchase journey, thereby affecting brand image and customer loyalty. Hence, 'product information management' (PIM) has become integral to an elevated consumer experience across channels. What is PIM? Product information management is a process of collecting, curating, enriching, quality checking, and managing all product data required to publish, promote, and sell products across channels. The combination of appropriate service layers and platforms enables efficient product information management. How does PIM work? PIM creates a centralized repository forming a single source of truth which enables creation and distribution of product catalogue across different ecommerce and sales channels. Product categorization based on various attributes, hierarchies and business rules can be automated through this single source of truth. Categorization on the basis of product line, product category, product size, and product color enables configuring the PIM tool to automatically classify a product into multiple hierarchies and represent them in appropriate nodes of the hierarchy along with reprenting relationships across these hierarchies through business rules. This can greatly help product managers as well as consumers. Who needs PIM? PIM is needed across the distribution chain by: How does it help? There are several business benefits of having the right tool with a well-trained PIM service layer such as: The combination of appropriate data, scalable platform, and a well-trained service layer enables retail and consumer packaged goods organizations to elevate consumer experience at every consumer touch point while creating efficiencies. The result is increased customer satisfaction, reduced cost, increased revenues, and eventually better profits. Rishi Reejhsinghani Deputy Manager, Presales and Solutions, Digital Operations & Platforms Rishi has business

strategy consulting experience with expertise in business study, business process re-engineering solution designing, and project management for clients in the retail and consumer domain.

www.wipro.com/blogs/bharat-raigangar/ ---- Contact Wipro Blogs By Author Zero Trust for secure third-party risk management Please fill the required details to access the content Bharat Raigangar Bharat Raigangar GM -Business Head - India, Middle East & Africa Cybersecurity & Risk Services Bharat is a cyber-defence enthusiast and an advisor in the domain of Cyber Risk Management, specializing in Cyber Defense, Cyber Fraud, and Cyber Resilience. He played a strategic role in building the Cyber Security Advisory Services practice at Wipro. Bharat has over 22 years of leadership experience in Global Risk, Compliance, Audit and Assurance. He also has experience as a Strategic Advisor, working with CXOs. Bharat possesses strong domain expertise in Program Delivery & Portfolio Management, Business Stakeholder Management & Strategic alignment, Risk, Compliance & Assurance Management, Integrated Program Planning & Workforce Management, Change Management, Mergers & Acquisitions - Divestments. He is also an honorary advisor for the ISACA UAE Chapter. The COVID-19 pandemic will have a lasting effect on our business and industry in general. It is no surprise that most corporate security profiles are being changed and 

## Zero Trust for secure third-party risk management

----- Arcticle source ----- https://www.wipro.com/blogs/bharat-raigangar/zerotrust-for-secure-third-party-risk-management/ ----- About the Author Contact Wipro Related Blogs Risk in the ESG Age Exchange of Cyber Threat Intelligence Among Peers Using Decentralized Identity Networks and IoFT Cybersecurity through collaboration Please fill the required details to access the content Zero Trust for secure third-party risk management July | 2020 The COVID-19 pandemic will have a lasting effect on our business and industry in general. It is no surprise that most corporate security profiles are being changed and updated on a regular basis. The resulting production and supply chain disruptions, remote working and labour shortages have resulted in operational challenges and business losses. Many organizations would have increased their dependencies on third parties as part of their crisis management plans without assessing the risks related to changes in third-party relationships. The evolution of software defined everything has increased cyber-related risks in terms of APTs, targeted attacks, insider threats in a multi-fold fashion. The current COVID scenario suggests the time has come to completely rethink how we define trust in considering how to secure critical data and resources while still relying on third parties. Zero Trust is the only way to protect organizations from such emerging & sophisticated threats. With the rise of COVID-19, the need for a holistic policy framework that can effectively manage security issues across a highly distributed workforce has grown exponentially. Zero Trust rejects the outdated idea that everything inside the internal network is safe, while

everything outside it is unsafe. It assumes instead that nothing is inherently safe. The Zero Trust concept goes beyond "trust, but verify" to command that we "never trust, always verify." CISOs are in the Business of Trust but Risk is their regular companion. They are fundamentally in the job of balancing risk-acceptance and risk-mitigation decisions, so that greater trust can be created. Zero trust establishes the framework for minimizing risk from third parties by examining security gaps that occur during these interactions. It unifies and consolidates security policies in-house, minimizing vulnerabilities created by insufficient security practices of outside vendors. Continuous verification - the foundation of zero trust ensures that the compromised vendor gets notified immediately, in near real-time. 'Assume breach' is the Zero Trust mindset, we must go beyond the enterprise to consider our partners, contractors and suppliers. Zero Trust hinges on the idea that, all vendors are essentially "guilty until proven innocent" in the realm of cybersecurity. So, all these vendors should be extensively assessed and 'graded' before they are onboarded to an organization's ecosystem. Running a one-time security audit isn't enough for a true Zero Trust security approach. Organizations leveraging a Zero Trust approach to CyberSec usually have to do more heavy lifting on the back-end before approving vendors than traditional companies. Zero Trust is the idea that you are essentially creating a secure perimeter around every single person that has access to your organization, both internally and externally. In order to successfully implement a security strategy at this scale, your team must be meticulously organized and prepared. This means having immediate access to all security assessments, vendor profiles, questionnaires, and other security reports in a secure location. The goal of Zero Trust security is to protect the company from advanced cybersecurity threats and data breaches, while helping the company achieve compliance with Regulations, Standards, and any future data privacy and security laws. For businesses to sustain, security and risk management leaders must establish and continuously assess trust using Gartner's CARTA approach -Continuous Adaptive Risk and Trust Assessment. Wipro provides a holistic approach for zero-trust security, leveraging a framework and a working model for continuous risk assessment of third parties. NIST SP 800-207 for Zero Trust Architectures, NIST SP 800-161 Supply Chain Risk Management Practices and NIST CSF recommends organizations "should evaluate service providers on a holistic basis by taking into consideration factors such as vendor security controls, enterprise switching costs, and supply chain risk management." Supply chain risk management programs require alignment of people, processes, policy and technology to organizational requirements and respective standards for implementation. In order to enforce Zero Trust principles, empower your teams with the visibility of everything going on in your vendor ecosystem- and the analytics to make sense of it all. Leveraging Zero Trust to enable Third party Trust: Knowing how data is shared — and where potential gaps in security occur — will allow your team to build comprehensive assessments and strategies to ensure these Zero Trust perimeters are built around vendor businesses. To achieve zero trust security, in such heterogeneous environments, requires enterprises to prioritize elements and security controls Zero Trust in a way that allows for the dynamic, continuing assessment of risk and that enables the business by continually applying visibility, insight and action to protect your most valuable assets. Zero Trust also means that we assume we are constantly

under attack or compromised, and build controls that leverage a Threatcentric security architecture. Adopt an integrated & continuous risk monitoring approach that can uncover hidden patterns, anomalies, threat vectors, and blind spots in order to proactively monitor and manage thirdparty risk while considering the changing enterprise risk landscape. With deep roots in technology, as well as domain expertise in risk and compliance, we are uniquely positioned to help you proactively manage third-party risk. Industry: Bharat Raigangar CDPSE C|CISO CRISC CGEIT CISM CISA CFE CICA CFAP CIA ITIL MBC GM - Business Head - India, Middle East & Africa Cybersecurity & Risk Services Bharat is a cyber-defence enthusiast and an advisor in the domain of Cyber Risk Management, specializing in Cyber Defense, Cyber Fraud, and Cyber Resilience. He played a strategic role in building the Cyber Security Advisory Services practice at Wipro. Bharat has over 22 years of leadership experience in Global Risk, Compliance, Audit and Assurance. He also has experience as a Strategic Advisor, working with CXOs. Bharat possesses strong domain expertise in Program Delivery & Portfolio Management, Business Stakeholder Management & Strategic alignment, Risk, Compliance & Assurance Management, Integrated Program Planning & Workforce Management, Change Management, Mergers & Acquisitions - Divestments. He is also an honorary advisor for the ISACA UAE Chapter. A tidal wave of ESG regulations is looming across markets. To prepare, companies are shifting responsibility for sustainability management and reporting to the risk management domain. Risk executives are investing in enhancing their governance, risk management, and compliance (GRC) systems to account for ESG factors. The ability to exchange cyber threat intelligence (CTI) in privacy preserving and in a secure manner is vital for enterprises to manage their security risks effectively. During the pandemic, dependence on digital technologies has seen unprecedented growth. From managing remote workforces to catering for changing customer expectations, the paradigm shift towards digital has brought a host of ----- https://www.wipro.com/blogs/anitha-prasad/ ----- Contact Wipro Blogs By Author Please fill the required details to access the content Anitha Prasad Anitha Prasad Head- EUS, CIO function, Wipro Ltd. Anitha has 20 years' experience in IT. She has worked as a technical consultant and architect in various domains over the years. She is the head of end-user services within Wipro CIO function and also a Senior member of DMTS (Distinguished Member of Technical Staff), a cadre of expert technologists who have the proficiency and thought leadership to shape Wipro's technology roadmap. She is a Diversity and Inclusion Champion for the CIO function. www.wipro.com/blogs/garima-sinha/ ---- Contact Wipro Blogs By Author MarTech: The best weapon in a CMO's arsenal to tackle the post COVID-19 world 4 Considerations for CMOs in a Post COVID-19 World Please fill the required details to access the content Garima Sinha Garima Sinha Director of Marketing, APAC, Wipro Garima has been driving business marketing outcomes through high human touch-led campaigns from the last 16+ years. She currently leads strategic engagements on Group Marketing front. She is also responsible for Y-o-Y marketing roadmap for the group and leads the conceptualization, execution & analysis of CXO connect programs, engagement across traditional, digital & social media. She also specializes in

portfolio analysis, implementation of 360 degree marketing across

marketing programs, customer segmentation, targeting, positioning & creation of customer-specific propositions. Garima can be reached at garima.sinha@wipro.com Marketing technology (MarTech) has seen exponential growth in the last few years (see Figure 1) to around 8,000 solutions today. Even before COVID-19 hit the world, marketing was undergoing a major digital transformation. In my last blog, I noted that MarTech will continue to be one of the four key focus areas for Chief Marketing Officers (CMOs) in the post COVID-19 world. Marketing strategies need to reflect the new realities in the post pandemic world

### 4 Considerations for CMOs in a Post COVID-19 World

----- Arcticle source ----- https://www.wipro.com/blogs/garima-sinha/4considerations-for-cmos-in-a-post-covid-19-world/ ----- About the Author Contact Wipro Related Blogs Metaverse: Business Implications, Monetization Models and Adoption Challenges How blockchain can hackproof a supply chain Agility is Hard Because Its Soft Please fill the required details to access the content 4 Considerations for CMOs in a Post COVID-19 World July | 2020 The COVID-19-induced lockdown sent global economies and consumer confidence spiraling. It also did something unique - it forced a significant change in consumer behavior. A BCG research shows Australian consumers have decreased spending, shifted focus to essential and local purchases, and are mostly shopping online. Businesses are responding to these shifts and evolving new models that help them be more economical and efficient. Many retail stores, for instance, have decided to close brick and mortar stores and move online. It's unclear whether this simpler, more virtual life will last long. However, the expectation from CMOs to tap into this new normal and deliver business results is amply clear. To do this, CMOs must focus on four key areas: Performance marketing to get more bang for your buck Working with limited budgets due to the cost constraints necessitated by COVID-19, 70% of marketers have already paused or decreased their ad investments. Marketing campaigns are increasingly being measured on performance and ROI. To be able to showcase ROI, marketers will need to capitalize on the data at their disposal and make informed decisions right from the start. The role of data analytics and artificial intelligence (AI) will become increasingly important to drive better campaign decisions, test performance faster, and course correct to drive maximum value. MarTech to optimize operations and drive efficiencies Even as data will play a key role in identifying best marketing opportunities, the role of technology will get stronger in driving efficiencies. There are over 8000 MarTech solutions available today and we'll see increased adoption of those that can deliver value for money. Campaign management tools, automation, social sentiment dashboards, 360-degree performance dashboards, project and workflow management tools, chatbots, etc. will find their way in every marketer's arsenal. Audience driven marketing The backlash several brands have faced for their callous use of COVID-19 related marketing is clear indication that consumers are fed up of irrelevant and

insensitive messaging and will retaliate. In a survey, 60% of adults in the U.S. said they have stopped buying from a brand because they disliked its ad campaign. Social media has increased the virality of this negative word of mouth and the writing on the wall is that brands will be held accountable for what they put out there. This means more checks and balances on the channels they choose to be visible on and also, what they say. We may soon see AI systems checking for unacceptable language or inappropriate messaging before a campaign is rolled out. Building connections in a truly boundaryless world One of the biggest impact of COVID-19 has been the overnight digitalization of the world. From remote workforce to changing consumer behaviors, the virtual world has opened up many new opportunities for marketers to capitalize on. For instance, marketers can engage audience virtually with cloud-based collaboration and communication tools like Zoom - an endeavor that is cost-effective and has a much wider reach. Aligning to the new normal It's an interesting and challenging time to be a marketer. Changes are everywhere and as an outcome; we are witnessing an acceleration in the adoption of technology in many aspects of marketing. We will talk about each of these areas in detail in the upcoming blogs. Till then, let me know how you see the future of technology-driven marketing shaping up. Industry: Garima Sinha Director of Marketing, APAC, Wipro Garima has been driving business marketing outcomes through high human touch-led campaigns from the last 16+ years. She currently leads strategic engagements on Group Marketing front. She is also responsible for Y-o-Y marketing roadmap for the group and leads the conceptualization, execution & analysis of CXO connect programs, engagement across traditional, digital & social media. She also specializes in portfolio analysis, implementation of 360 degree marketing across marketing programs, customer segmentation, targeting, positioning & creation of customer-specific propositions. Garima can be reached at garima.sinha@wipro.com The Metaverse is collapsing the physical and virtual worlds to create a paradigm shift in interactions between customers, suppliers, partners, employers and employees. It's every company's worst nightmare. In 2019, a global metals manufacturer experienced a ransomware attack in which hackers seized and encrypted its computer files, then demanded payment to unlock them. Agility as a concept has been discussed for years, though the competitive advantage of being more agile came into sharp focus in 2020. The increased pace of change, rapidly evolving customer needs, compressed timeframes for responding — all of these and more drove the topic back onto every Board agenda.

## MarTech: The best weapon in a CMO's arsenal to tackle the post COVID-19 world

---- Arcticle source ---- https://www.wipro.com/blogs/garima-sinha/martechthe-best-weapon-in-a-cmos-arsenal-to-tackle-the-post-covid-19-world/ -----About the Author Contact Wipro Related Blogs Metaverse: Business Implications, Monetization Models and Adoption Challenges How blockchain can hack-proof a supply chain Agility is Hard Because Its Soft Please fill the required details to access the content MarTech: The best weapon in a CMO's arsenal to tackle the post COVID-19 world September | 2020 Figure 1: Growth of the marketing landscape In a highly digital world and facing shrinking budgets, marketers have an opportunity to innovate with MarTech solutions. Technology can help the CMO become a more strategic partner to business and help them answer critical questions around customer needs. product features, demand forecasting, pricing, targeting and segmenting, campaign effectiveness, customer support, etc. in real-time. In fact, a Wipro survey found that MarTech proficiency was a key skill requirement for CMOs. Technology projects that leveraged artificial intelligence (AI), machine learning (ML), or sentiment analytics might have been considered ambitious just a few years ago, but now they are a necessity for the savvy marketer. This is true especially in Asia where marketers need to stay focused on mobile-first micro-moments. The key areas of technology impact and highest number of solutions in APAC will be around social media, relationships, content management, and customer experience. Digital technology will be critical to sail through the disruption caused by COVID-19. Let's take a look at some of the key technology areas that will be important in the coming days: COVID-19 has forced organizations to re-look at the way they do business and go digital; and marketing is no exception. We will see increasing investment in marketing technologies as CMOs tighten the ship and focus on performance. Where do you see MarTech investments being focused? How are you planning to leverage MarTech in the post COVID-19 world? Industry: Garima Sinha Director of Marketing, APAC, Wipro Garima has been driving business marketing outcomes through high human touch-led campaigns from the last 16+ years. She currently leads strategic engagements on Group Marketing front. She is also responsible for Y-o-Y marketing roadmap for the group and leads the conceptualization, execution & analysis of CXO connect programs, engagement across traditional, digital & social media. She also specializes in portfolio analysis, implementation of 360 degree marketing across marketing programs, customer segmentation, targeting, positioning & creation of customer-specific propositions. Garima can be reached at garima.sinha@wipro.com The Metaverse is collapsing the physical and virtual worlds to create a paradigm shift in interactions between customers. suppliers, partners, employers and employees. It's every company's worst nightmare. In 2019, a global metals manufacturer experienced a ransomware attack in which hackers seized and encrypted its computer files, then demanded payment to unlock them. Agility as a concept has been discussed for years, though the competitive advantage of being more agile came into sharp focus in 2020. The increased pace of change, rapidly evolving customer needs, compressed timeframes for responding — all of these and more drove the topic back onto every Board agenda.

==============================----- Arcticle source ----- https://www.wipro.com/blogs/mathew-joseph/ ----- Contact Wipro Blogs By Author Post COVID-19 World Demands Intelligence Here's How Companies Can Build It Please fill the required details to access the content Mathew Joseph Mathew Joseph Business Head, Data, Analytics and AI - Middle East, Wipro Mathew and his teams help clients build intelligent organizations by harnessing the power of data and insights. His core areas of focus are

#### Post COVID-19 World Demands Intelligence: Here's How Companies Can Build It

---- Arcticle source ---- https://www.wipro.com/blogs/mathew-joseph/postcovid-19-world-demands-intelligence-here-how-companies-can-build-it/-----About the Author Contact Wipro Related Blogs AI Driving 5G Innovations for Communications Service Providers Making ML Models in Banking Resilient using Adversarial Attacks Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Please fill the required details to access the content Post COVID-19 World Demands Intelligence Here's How Companies Can Build It July | 2020 COVID-19 continues to dictate new norms on how we live, work, and conduct business. Amidst fears of recession, companies globally are looking at technology to bridge the gap in reduced cash flows and accelerated growth aspirations. Global organizations are striving to build self-run, automated, and intelligent businesses that don't succumb to threats like COVID-19. This is an area where companies in the Middle East, even with a much smaller dollar spend on technology, are ahead of their global peers. The Middle East market has already made strides towards building Intelligent organizations and artificial intelligence (AI) and machine learning (ML) are seeing increased interest. Powerful though these technologies are, for maximum impact, it's important to have a clear-cut approach while embarking on AI-driven transformation journeys. Three key areas organizations should consider before investing are: IDENTIFY & REASSESS Impactful Activities Technology advancement has given us a unique opportunity to have an outside-in view of our business. Today, we have technologies available to dissect sentiments of our customers and business stakeholders using data from their social and online interactions. Organizations are today contextualizing external data with internal data to create models that can highlight opportunities of improvement. Data is also a powerful validator to see if the organization's journey is in the right direction. To make use of this data, it's important to have an understanding of your business processes and the critical activities that influence your business growth. This helps in understanding bottlenecks and running hypotheses to see what could happen if we change these activities. Take for example, the loan origination and loan servicing process in a financial institution. There are 5 key activities amongst several that if changed can fuel better productivity. So, if an AI engine is in place at activity 2, it can process customer data regarding financial history and propensity to pay etc. and flag potential defaulters or fraudsters. Similarly,

AI-based chat bots can help improve customer service (activity 4) by either automating the transaction completely or offering sentiment-analysis based insights to agents for better customer experience(see Figure 1). Bringing technology in these areas will improve productivity and reduce cost and effort, validating investment. Figure 1: Identifying impactful areas for technology investment in loan origination and servicing process To identify impactful activities, organizations can use parameters like dollar savings, reduced cycle times, market differentiator etc. Many organizations also use surveys and internal employee sentiment to understand potential opportunities for improvement. Once identified, data science can help evaluate the opportunities, impact, and the consequence of change in these activities in a more scientific manner. The output of this evaluation would be a high-level estimate of the potential value that can be generated from these optimization programs. Sample use cases where technology can make an impact on identified activities RECALIBERATE Identified Impactful Activities Impact assessment gives the organization a clear idea on improvement bottlenecks and potential intelligent algorithms that could positively recalibrate the business. The next, and extremely important step, is operationalizing the various improvement areas that have been identified. Augmented intelligent algorithms coupled with machine learning capabilities and an innovation-based approach help organizations move to a steady reinventing mode. Technologies like artificial intelligence, advanced analytics, robotic process automation, blockchain etc. work hand in hand to help organizations recalibrate to this new way of working. Many organizations run design thinking workshops along with innovation labs to ensure that the best ideas are generated and tested with adequate data to identify the most optimum mode of work. Once the approach looks feasible, it needs to be piloted, the results analyzed, and operationalized. HUMANIZE Identified Impactful Activities While technology plays an important role in making an organization intelligent, the humanizing factors to this journey cannot be undermined. The recalibrated environments need to act as inputs for critical decision-making and should work in a controlled environment to deliver optimum results. Change Management is a key activity that should go hand in hand with such a program. Educating and coaching various stakeholders on the technology options and working with them to identify and overcome business challenges are important factors to any of these programs. Journey towards a new paradigm This 3-pronged approach will help companies in the Middle East reap maximum benefits from their AI and automation programs while augmenting their human potential. Where are you on this technology transformation journey? How do you see AI and automation shaping up in the near future? I'd love to discuss your approach. Write to me at mathew.joseph1@wipro.com Industry: Mathew Joseph Business Head, Data, Analytics and AI - Middle East, Wipro Mathew and his teams help clients build intelligent organizations by harnessing the power of data and insights. His core areas of focus are Insights & AI Strategy, Information Lifecycle Strategy, Data Consumption & Storage Strategy, and aligning Strategy to Performance Management. Mathew comes with a rich experience across Consulting, Sales, and Program Management. He is an Engineer with a Master's Degree in Business Management. 5G is a complex network that involves millions of interconnected devices and offers lowlatency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decisionmaking and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. www.wipro.com/blogs/nikhil-goel/ ----- Contact Wipro Blogs By Author AI IN DIGITAL LENDING Please fill the required details to access the content Nikhil Goel Nikhil Goel Digital Consulting Partner & Head - Digital Consulting India Business Nikhil Goel is a Consulting Partner Digital in the Global Consulting Business for Wipro. He has over 22 years of Consulting and Advisory experience across Public and Private Businesses. His areas of specialization include Digital Strategy, AI Strategy & Consulting, as well as Thought leadership, with an objective to transform business outcomes. He has authored several white papers and points of view on various topics covering Artificial Intelligence in effective Customer Personalization, Risk, Banking, Digital Supply Chain, and Warehouse Automation. Banks/NBFCs (Lenders) and other traditional lending financial institutions find themselves operating in times where it is all about how well they know their customers, and how they can use this knowledge to grow their lending business. ===============

#### AI IN DIGITAL LENDING

---- Arcticle source ---- https://www.wipro.com/blogs/nikhil-goel/ai-in-digitallending/ ---- About the Author Contact Wipro Related Blogs Data: A Strategic Asset Enabling Value Creation for Insurers Why Cyber Resilience Depends on Trust and Information Sharing Leading the Path to Recovery and Resilience Please fill the required details to access the content AI IN DIGITAL LENDING July | 2020 Banks/NBFCs (Lenders) and other traditional lending financial institutions find themselves operating in times where it is all about how well they know their customers, and how they can use this knowledge to grow their lending business. Customers' expectations on the other side of the business are akin to what they might experience when they deal with e-commerce companies such as Amazon. Anything short of this experience and you can see customers gravitating toward the competition. Then there are Digital Natives FinTechs that have new ways of reaching out to customers and understanding them better. This is leading to reduced market share for traditional lenders (banks/NBFCs). Now, we hear Google[1] is all set to enter the lending space. To sum up, the lending space is undergoing a massive transformation and lenders need to think of ways and means to adapt to this transformation. Embracing Digital Transformation driven by digital technologies can help lenders grow their loan book and acquire more customers. Specifically, under the larger umbrella of digital technologies, Artificial Intelligence (AI) is the differentiator. AI can unearth and learn customer-behaviour patterns that help lenders differentiate themselves from the competition. Let's look at a couple of high-impact areas that AI can influence significantly in terms of transformation, and help

lenders improve their loan books. Customer Acquisition - AI DRIVEN Customer buying journeys for lending products have changed dramatically over the years. With customers being online 24/7, they leave a lot of behavioural footprint on digital properties of lenders or their affiliates. AI can help lenders understand this customer behaviour and predict possible business outcomes of this behaviour to lenders. This includes predictions such as whether a customer really intends to purchase a lending product. What AI does here is model the intent of customer purchase by utilizing the clickstream data, search data, and other such data. Based on the AI model outcome, customers can be bucketed into 'must reach', 'requires more effort' and 'not interested' categories. There can be more categories per business requirements. Based on this categorization of customers/prospects, lenders can reach out to them in a targeted manner, and at a very early stage of the sales funnel engagement. AI can also help when it comes to the 'Next Best Offer' or 'Next Best Action', similar to Precision Marketing, where lenders can reach out to customers in a targeted manner through personalized products to nudge the customers to complete the purchase of lending products. CREDIT SCORING - AI DRIVEN Customer credit scoring/ eligibility for a loan is a major challenge plus a critical business differentiator for lenders. Credit scoring is a major function that decides the customer's eligibility for a loan, and also is a vital factor to drive the loan book for lenders. Also, this process is currently either manual or rulesdriven depending on the lender's maturity. Additionally, the process is very bank branch driven, where credit managers in branches take a call on the credit. In a nutshell, credit scoring is both an operational and a business driver for lenders. AI can disrupt this space and help banks to grow their loan book. How? AI can enable an ALTERNATE CREDIT MECHASISM for lenders. AI can use 300-400 data points related to customer behaviour, financial history, income tax history, and other transactions, to derive a credit risk score for a customer. Lenders have been using financial and other data in the past for credit. However, with AI, they can utilize more data points on customer behavior and that gives them a key differentiator. What are these data points? These include customer behavior on the digital property of a lender or its affiliates, customer social profile - what friends do customers have; to whom is the customer connected on social media across Facebook, LinkedIn, or any other social medium; number of hours of usage of a mobile phone, mobile phone type, mobile call details, mobile battery patterns, mobile apps, educational qualifications, wallet usage data, payments usage data, etc. AI models can ingest this structured & unstructured data and model this data with an output as a credit score. This credit score can be predicted in real-time or offline, as lenders choose. With this credit score, lenders can reach out to existing customers in a bid to sell a pre-approved loan product or reach out to new prospects. This helps lenders send out personalized messages to customers /prospects, and in turn, grow their loan book. Such a credit mechanism also reduces risk and brings standardization in issuing loans across branches /offices of lenders. Lenders are facing a multitude of challenges in growing their loan book. We feel the above-mentioned initiatives will help lenders grow their loan book, while also giving them that competitive edge. References [1]https:// techcrunch.com/2020/06/25/google-online-lending-google-pay-indiamerchants/

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Industry: Nikhil Goel Digital Consulting Partner & Head - Digital Consulting India Business Nikhil Goel is a Consulting Partner Digital in the Global Consulting Business for Wipro. He has over 22 years of Consulting and Advisory experience across Public and Private Businesses. His areas of specialization include Digital Strategy, AI Strategy & Consulting, as well as Thought leadership, with an objective to transform business outcomes. He has authored several white papers and points of view on various topics covering Artificial Intelligence in effective Customer Personalization, Risk, Banking, Digital Supply Chain, and Warehouse Automation. The insurance industry has tradionally relied on data sources such as claims history to underwrite known and measurable risk. In the early stages of the pandemic, the sudden shift to remote work triggered a flood of cybersecurity threats. Of the nearly 200 organizations surveyed in Wipro's upcoming State of Cybersecurity Report 2020, the majority (70%) report challenges maintaining endpoint security. Phishing scams spiked; 73% of organizations cite them as their top security threat. Not all companies were born digital, but they must now adapt to the digital demands of our world's current situation. As the wave of COVID-19 traverses across the world, business resilience has emerged as a strategic avenue.

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## Engineering Provides the Connective Tissue for Our Connected World

----- Arcticle source ----- https://www.wipro.com/blogs/harmeet-chauhan/ engineering-provides-the-connective-tissue-for-our-connected-world/-----About The Author Contact Wipro Related Blogs Connectivity and Interoperability: Realizing the Full Potential of Comprehensive IoT Solutions Strategic Partnerships Will Drive 5G Success for Communications Service Providers Using IoT to Create an Intelligent Enterprise Please fill the required details to access the content Engineering Provides the Connective Tissue for Our Connected World July | 2022 Imagination and innovation have been at the heart of key advancements throughout history. From the wheel and printing press to the telegraph and smartphone, the innovative spirit of those who wondered "what if?" has brought about solutions that connected society and improved our daily lives. This spirit of translating imagination and innovation with engineering has brought us to where we are today: a world driven by 5G, AI, IoT and the metaverse. Some people define engineering as the process of using scientific principles to build something new. This is a good definition, but it's incomplete. At Wipro Engineering, we believe engineering is about turning imagination into innovation. It's about creating differentiated technologies and platforms that enable companies to push beyond their limits. It's about helping organizations establish a competitive edge and build a bridge to their ambitious future. New Era, New Engineering Energy For many decades, traditional engineering focused on infrastructure, electrical and mechanical pursuits. Today, engineering provides the connective tissue for our connected world. The spectrum of

engineering services has widened to meet the demands of a modern era. 5G, cloud, connected devices, AI, automobiles, mobile devices, factories of the future ... wherever there's a sector or solution reliant upon technology, a Wipro engineer has likely been involved. Without engineering, smart devices can't work, software and systems can't connect, and enterprises can't evolve. Today's engineers are part of the first generation born into a hightech world. They are creative, curious, and want to have a positive impact. They won't wait for things to change; they will make change happen. Engineering has always been the heart of Wipro. But in today's always-on world, it's our engineers' drive for "the new" and passion for "the possible" that have become the heart of our connected, collective future. This new generation sees engineering as part of the solution to sustainability challenges. They see an opportunity to improve human health and productivity. They see engineering as a key contributor to redefining how we connect and engage with the world around us. And they're right. From semiconductors, healthcare and manufacturing to telecom and automotive, engineering plays a role in achieving every industry's ambition. Engineers around the globe are tackling some of the world's most complex problems and developing innovative solutions that will take us from "what is" to "what could be." At the Precipice of Tomorrow Engineering has always been about vision and imagination. It's always enabled innovative solutions that redefine how societies advance, and companies grow. That criticality is even more pronounced moving forward. For more than three decades, Wipro has been on the edge of engineering innovation, helping companies embrace new platforms and technologies. Today, Wipro Engineering enables clients to overcome their existing limitations and take the leap from their current state to the future they envision. We are proud that our Engineering Edge has helped companies worldwide realize their ambitions. From AI to augmented reality and infotainment to Industry 4.0, many of the conveniences we take for granted today were merely a vision two decades ago. As products, services, companies, and communities become increasingly connected, Wipro engineers will continue turning imagination into innovation, giving companies an edge in a hyper-competitive and fastchanging world. The future is full of exciting opportunities. What is your ambition? And how can Wipro help you engineer a bridge to that outcome? Harmeet Chauhan SVP and Global Head, Wipro Engineering Harmeet Chauhan is Global Head of Wipro Engineering. In his role, Harmeet is responsible for defining and driving Wipro's global vision and strategy for engineering services; 5G; Industry 4.0 and IoT; and Wipro Holmes, Wipro's augmented intelligence platform. He is a proven business leader with technology industry experience across products and engineering services businesses. To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. CSPs are looking to the enterprise (business-to-business) segment to help monetize their investments in 5G. As management guru Peter Drucker once said, ----- Arcticle source ----- https://www.wipro.com/blogs/gaurav-parakh/ -----Author's Post Contact Wipro Please fill the required details to access the content Gaurav Parakh Gaurav Parakh Senior Business Consultant & Analyst, CTO Office Gaurav is a Director in Service Transformation at Wipro. Based in the UK, he provides consultancy and advisory services to Wipro's key customers worldwide. Gaurav has 20+ years of experience in

## How You Can Reimagine DevOps Monitoring with Open Source

----- Arcticle source ----- https://www.wipro.com/blogs/gaurav-parakh/howyou-can-reimagine-devOps-monitoring-with-open-source/ ---- About The Author(s) Contact Wipro Please fill the required details to access the content How You Can Reimagine DevOps Monitoring with Open Source February | 2021 Adoption of DevSecOps is growing across IT organizations in all industries. As we know, these aren't new concepts. For years, organizations have been adopting new processes like Agile, governance and automation to improve collaboration between traditionally siloed functional groups to improve time to market and reduce issues. This push has helped many organizations reduce total cost of ownership and assure a smoother path from ideation to deployment. However, in many organizations, DevSecOps is mainly being adopted more as a role and less as a culture over the years. This approach, often, tends to be implemented as yet another silo for build and release management within the organization. Leveraging the core principles of DevSecOps, companies can implement Agile ways of working and open source practices to make continuous improvement to the complete product development lifecycle. Effective collaboration across DevOps teams can help remove traditional silo mentality, allowing for constant communication between development, operations, and quality assurance (QA). The understanding of overlapping responsibilities and continuous collaboration improves employees' productivity and promotes creativity and innovation. DevOps success with open source The key issues organizations traditionally faced with building and deploying applications have been long and manual processes that required dedicated resources. This often caused organizations to deal with frequent issues and rollbacks, making it difficult to meet customer expectations. As continuous delivery or continuous deployment (CICD) became a more focused process for managing application deployment the need to remove manual processes and providing tooling that is more flexible at reduced cost has been the push across the industry. Open source has risen out of necessity over the years to provide majority of the tooling used by organizations for DevOps. Tools like Jenkins, Nexus, Artifactory, Git, Maven, Gradle, Jacoco, Terraform, Ansible and many others have become more mainstream in providing a means to deliver automated provisioning and end to end CICD pipelines to reduce time to market and total cost of ownership. As organizations begin to migrate from manual to full automation, it is critical for them to be proactive in their approach to monitoring. While organizations monitor the infrastructure, logs and applications that are running in production, many neglect to monitor the pipelines beyond the internal logging or minimal status codes that each tool provides. Sometimes, monitoring can spread across as few as 2 to 5 or more separate dashboards requiring resources to jump between tools to get a broader picture of performance. Here too, open source has provided an answer in the form of near real-time and end-to- end observability using Hygieia. Hygieia - Delivering end-to-end DevOps observability Hygieia provides a next generation approach to DevOps monitoring by providing a fully customizable visualization of the end-to-end code to delivery process. Built completely as an open source and maintained by a growing community it allows companies to use a "single pane of glass" to monitor performance and efficiency through the entire development and delivery lifecycle (See Figure 1). As a data aggregator, Hygieia collects data from different DevOps tools, exposing the data via APIs and presenting the data through configurable dashboards allowing you to choose the layout that works for the organization. These targeted dashboards give focused metrics to both Developers and Executives. The Developer Dashboard is focused on providing operations staff and developers relevant near real time metrics. It provides essential information on the status of each step in the pipeline to reduce time gathering information from multiple sources. Operations staff can more proactively manage the trends in system uptime and stability to define future scalability requirements in one comprehensive view. The Executive Dashboard (Shown in Figure 2) provides broader insights into the DevOps component relationships that are displayed in a format ideal for senior leadership. Using the data gathered from the variant tooling, the dashboard provides portfolio level metrics that help to understand the stability and potential strategic need for growth across DevOps processes. Toward resilience with better visibility The necessity of increasing observability across the enterprise has become all the more crucial and DevOps is no different. Hygieia provides that visibility to assure proactive detailed data into the complete DevOps landscape. Companies like Verizon, T-Mobile, Walmart, American Airlines, Wipro and many others have already taken an active role in contribution and adoption of Hygieia. As our landscape and ways of working continue to evolve, increased monitoring and availability of key metrics will help organizations ensure increase in actionable insights for strategic planning. It will also help in scaling out to assure better business continuity and readiness when dealing with disasters. Interested in knowing more? Connect with us to understand how we can help empower your DevOps journey with open source Gaurav Parakh Senior Business Consultant & Analyst, CTO Office Gaurav is a Director in Service Transformation at Wipro. Based in the UK, he provides consultancy and advisory services to Wipro's key customers worldwide. Gaurav has 20+ years of experience in international business and IT consultancy in open source, cloud, digital transformation, marketing and business development. He has been instrumental in launching multiple tech start-ups from ideation, build, to exit across cloud, 3D printing, and AI. He holds a MBA in International Business from Ecole nationale des Ponts et Chausses, Paris and Bachelor of Science degree from the University of Bradford, UK. You can reach Gaurav at gaurav.parakh@wipro.com Eric Tice Global SME Lead, CTO Office Eric Tice is a Director and the Global Open Source SME Lead in Service Transformation at Wipro. Eric leads a team of Enterprise and Solution Architects that help to evangelize and provide open source technical consulting to clients in areas such as digital transformation,

DevOps, cloud native and multi-cloud enablement. Eric has over 20 years of industry experience working with open source technologies and providing strategic technical direction as an architect, developer and manager. You can connect with Eric at eric.tice@wipro.com

# Evolution of the Operating Model to manage Cloud infrastructure services

----- Arcticle source ----- https://www.wipro.com/blogs/gaurav-parakh/ evolution-of-the-operating-model-to-manage-cloud-infrastructure-services/ ----- About the author Contact Wipro Related Blogs Cloud Economics: Driving Business Value Through Discipline De-Risking Mainframe Modernization for the Banking Industry The Day After: De-risking Legacy Modernization Please fill the required details to access the content Evolution of the Operating Model to manage Cloud infrastructure services November | 2022 Product-based, service-oriented architecture is more relevant than ever. Businesses are increasingly realizing the need to have a modern, agile approach to software development and infrastructure architecture. The key challenge, however, is building a platform solution that can deliver on the power of service-oriented architecture, while providing a foundation to meet future cloud demands. A few questions that need deliberation are: Based on the key challenge and the self-assessment questions, businesses can arrive at a new way of thinking. A Cloud Centre of Excellence and Expertise (CCoE) leads the organization in cloud adoption, migration, and operations. It is a cross-functional ecosystem of people, processes, and tools embedded in a business-aligned operating model. CCoE is responsible for developing and managing the cloud strategy, governance, development, and best practices - which the rest of the enterprise can transform the business leveraging the cloud. The Cloud Centre of Excellence (CCoE) consists of three pillars: CCS challenges Of the three, Cloud Central Services (CCS) offers the most challenges since it deals with multiple personas trying to understand, use, and modify the infrastructure-as-code (IaC). Also, with the constant evolution of governance, compliance, and security, it can be daunting to balance best practices, while still promoting lean, efficient delivery. Businesses may also have skilled operators who act as producers, managing cloud infrastructures, and developers who abstract themselves from provisioning infrastructure to avoid being the impediment to delivery. The disparity of tooling and processes increases time and resource costs, while different teams us different tools and methods, making team coordination difficult. Mixing ad-hoc development workflows and disparate infrastructure deployment processes exemplify disorganisation. Evolving to a new operating model A new target-operating model is evolving for the cloud to satisfy product-based service-oriented architecture. The model combines a platform engineering team, enriched with site reliability engineering capabilities that is responsible for operations. This team uses templates, IaC scripts and policies, to deliver capabilities to product teams,

who consume services via APIs. A horizontal platform can be implemented and deployed immediately, enabling developers to build reusable interfaces while establishing a core framework for integration. Enterprises no longer need to rip and replace . Platform and Cloud Infrastructure Services - New Target Operating Model Platform Engineering Squads: The nirvana stage is reducing and eliminating repeated manual tasks and fully automating the tasks as cloud adoption process matures. Business outcomes: When the model matures, architects bridge technical and the non-technical stakeholders and implement standards that everyone can understand and apply. The model brings transparency to everyone, supports growth, and provides a standard framework for common tooling across development, operations, and stakeholders. Key outcomes: Improved visibility and collaboration By having design, code, and documentation on the same platform, everyone can understand how the infrastructure is built. Teams can review code and suggest improvements. They can learn to reuse automations in other applications, troubleshoot, and review/audit for compliance. After everyone has been on-boarded and cloud assets have been centralised, efforts can be undertaken to share a common vision on who needs to be responsible for what, along with a strong focus on execution. Reduced costs and efforts spent on on-boarding and training new employees. Once teams share the same working environment, communication and collaboration becomes easier. By simultaneously working on the same infrastructure, teams can mentor the new hires and teach best practices. Teams can access infrastructure documentation and reuse templates created by other team members. By process end, the business will have a system to track all engineering work in one place and communicate it to stakeholders with minimal overhead. Going forward, build effective, remote distributed agile teams, with transparency and ways of working that are both flexible and scalable, and fuel product-oriented architecture that leverages a resilient and fully automated platform. Industry: Gaurav Parakh Director - Cloud Strategic Pursuits, iCORE -Europe Gaurav is a Director at the Cloud Europe team at Wipro. Based in the UK, he provides consultancy and advisory services to Wipro's key customers. Gaurav has 22+ years of experience in international business and IT consultancy in the cloud, open source, digital transformation, go-tomarket, and business development. He has been instrumental in launching multiple tech start-ups from ideation, and build, to exit across cloud, 3D printing, and AI. He holds an MBA in International Business from Ecole Nationale des Ponts et Chausses, Paris, France and a Bachelor of Science degree from the University of Bradford, UK and Digital Transformation certification from the Massachusetts Institute of Technology, (MIT) Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological

### Focus on Collaboration to Sustain Sustainability

----- Arcticle source ----- https://www.wipro.com/blogs/dinni-lingaraj/focus-oncollaboration-to-sustain-sustainability/ ----- About The Author Contact Wipro Please fill the required details to access the content Focus on Collaboration to Sustain Sustainability February | 2021 The concept of corporate responsibility has evolved considerably over the past two decades, now encompassing such foundational ideas as the Triple Bottom Line, the Principles of Responsible Investment (PRI), and Environmental, Social, and Governance (ESG)-based investing. More than \$40 trillion of assets under management worldwide are based on ESG criteria, and analysis shows that companies that score high on ESG criteria outperform the market. It's increasingly apparent that ESG criteria are important in evaluating not only a company's governance and leadership, but also its longevity. These trends reflect what survey after survey have shown: that growing numbers of stakeholders—employees and senior leaders, as well as customers and partners—want to work for or deal with sustainable companies. Yet when it comes to sustainability initiatives, one thing that's often forgotten is the power of collaboration. Any company that has succeeded in its sustainability efforts knows that these efforts take an unwavering commitment from the top. Many companies, Wipro included, have managed to embed the commitment to sustainability in their culture and value system. But this alone is insufficient. To sustain their sustainability aims, companies must look beyond themselves to enlist others in what is truly a global endeavor. Sustainability is a Group—and Global—Effort In July 2020, Wipro joined forces with nine of the world's largest companies, including Unilever, A.P. Moller-Maersk, Microsoft, Mercedes-Benz, and the Environmental Defense Fund, to found Transform to Net Zero. By sharing best practices and knowledge gained from our collective experimentation and experience, this cross-industry coalition aims to inspire companies to action and help them advance in their efforts toward achieving net-zero emissions. One best practice we've gained from our long track record in sustainability is to think outside our four walls. For many companies, internal operations actually represent a fraction of their total emissions. At Wipro, for instance, nearly 75% of our carbon footprint comes from outside our own operations. Herein lies the challenge: companies can only achieve carbon reduction across their value chain by looking at the full lifecycle of their products and services.

Transforming to net zero is guite literally a group effort. Addressing the value chain footprint is a complex business, more so today because of the interconnectedness of the global economy. Conversations have moved beyond "offsetting" negative impacts and towards "insetting"—investing in initiatives in your own value chain. With this approach, companies need to honestly assess their total footprint, upstream as well as downstream, and consider what changes they might make in how they design products. That includes designing for refillability and recyclability. Four Recommendations Whether launching a sustainability program or expanding an existing one, the following four takeaways—all of which have borne fruit for our company —can easily be applied by others. Competition may be hard-wired into the business mindset, but sustainability depends on cooperation and collaboration within and across industries. The practices of every company, regardless of industry sector, have a bearing on the well-being of people as well as of the earth. Much as we live, work, and play on the same planet, we must think and act collaboratively to build and sustain sustainability programs for the long term. Dinni Lingaraj Group Manager Corporate Sustainability Program Dinni leads the sustainability charter for Wipro and, with the sustainability initiatives program team, collaborates with industry and the government on various ecological, social, education, and community programs. The team anchors disclosures based on global frameworks like GRI, CDP, DJSI, IIRC, and OeKom among others.

### The Tradeoff Between Cloud and Customization

----- Arcticle source ----- https://www.wipro.com/blogs/harish-dwarkanhalli/ the-tradeoff-between-cloud-and-customization/ ---- About the Author Contact Wipro Please fill the required details to access the content The Tradeoff Between Cloud and Customization February | 2021 Technology changes all the time, but one aspect remains constant: The hype around new platforms, tools, and applications can lead to unrealistic expectations. Cloud is a good example. Research says that more than 75% of midsize and large organizations will adopt a hybrid or multi-cloud strategy this year, if they haven't already. Yet many organizations have been dissatisfied with their cloud experience thus far. They spend more than anticipated on implementation, and the user experience doesn't meet expectations. They feel like they were sold a BMW and only get the experience of a Pontiac. Talent is one part of the problem, but a bigger issue is the degree of customization. If companies can make clear-eyed, objective decisions about these parameters, they can capture the benefits of the cloud. Talent is a major constraint. Developing and implementing software-as-a-service requires new skillsets and expertise that simply may not exist in a company's IT department. Software engineering skills are a must, of course, but because the range of potential applications is so significant, companies

need business analysts and consultants who can analyze the current operating model and determine where cloud can deliver the biggest benefits. And because cloud represents a significant transformation, companies need strong change management skills to get the implementation right. Given that most large companies across regions and industries are moving to the cloud, all of these skills are in high demand and short supply. A complicating factor is that the decision to implement a cloud app is often made by business leaders, who soon realize they need IT to help implement and manage the new solution. As a result, the IT function is caught unaware and needs to source talent with specific expertise on short notice. Related to that, cloud solutions often trigger a culture clash in organizations. Cloud solutions require a very agile approach to the software delivery lifecycle, but many organizations still use the traditional approach: the business side provides requirements, and IT delivers.

The biggest disconnect lies in the degree of customization that companies can expect. Companies that want to move to the cloud typically have dozens of established processes, in areas ranging from operations (procurement) to HR (hiring and onboarding) to product development (design to manufacture). The typical thinking is that these can be shifted to the cloud as-is—the same process that users know and are comfortable with, simply made more accessible. That's only possible if companies build custom software to meet their needs, an approach that is prohibitively expensive. If they're going to use established software-as-aservice (SaaS) offerings from a cloud provider, they'll have to adapt their existing processes accordingly. In that way, custom cloud development is like hiring a private chef—that person can cook any dish, any way you want, but it's expensive. Using a cloud provider is more like getting takeout. You order from a preset menu of options, with some degree of flexibility and adaptability. To get there, companies need to understand that their processes will change in order to become standardized. Some aspects will change dramatically, requiring a change-management program to ensure adoption. This isn't as much of a drawback as many company leaders think, particularly for back-office processes that are often guite similar across organizations. In fact, by aligning with standardized processes already in place at leading companies, many organizations—particularly incumbent players with deeply ingrained ways of working—can actually improve the user experience with minimal effort. The processes at these companies have evolved over time and are largely centered around functional needs such as compliance or processing. They worked in the past, but they don't delight users anymore. In redesigning and standardizing these processes, companies can catch up to the industry standard and deliver a better experience to users (both internal and external), while also capturing the cost and accessibility advantages of the cloud. There are talent implications as well: companies will find it easier to attract or train teams that are familiar with standardized processes and ensure that these systems can be effectively maintained over time. That's a marked change from the current situation, where "tribal knowledge" about how very specific processes happen lives in the heads of employees—and leaves the organization when they do. To accelerate the implementation of cloud solutions, Wipro applies a three-part framework. Throughout the implementation process, organizations need to adopt an agile approach, with cohesive, crossfunctional teams—comprising both business and IT—running the initiative

together. If companies can calibrate their expectations and move from a mindset of customization to one of standardization for most processes, they can mitigate the challenges of talent constraints and high implementation costs. Moreover, they can get to the cloud more quickly, meaning a faster path to begin capturing value.

Arcticle source ---- https://www.wipro.com/blogs/sanjeev-mittal/ ---- Author's Post Contact Wipro Please fill the required details to access the content Sanjeev Mittal Sanjeev Mittal General Manager, Business Head - Data, Analytics & AI, Wipro Focusing on key industry sectors like Financial Services, Energy, and Utilities, Sanjeev helps clients leverage Data, Analytics, and Artificial Intelligence to drive digital transformation initiatives. He also nurtures alliance partners to deliver comprehensive ecosystem benefits to our clients. Sanjeev brings a broad perspective with 22 years of combined sales, solutions, and delivery experience.

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# How to Leverage Snowflake to Capitalize on Public-Cloud Advantages

----- Arcticle source ----- https://www.wipro.com/blogs/sanjeev-mittal/how-toleverage-snowflake-to-capitalize-on-public-cloud-advantages/ ----- About the Author(s) Contact Wipro Please fill the required details to access the content How to Leverage Snowflake to Capitalize on Public-Cloud Advantages February | 2021 The total cloud computing market worldwide is expected to reach \$623.3 billion by 2023. Much of this growth will go toward the public cloud. The reason is simple: it can address complex processes while offering global availability, agility, elasticity, flexibility, and a reduced total cost of ownership. At a basic level, public cloud computing offers compute, storage, and networking - and every data environment requires all of these to perform well. Consider a public cloud's applicability to the financial sector. Global financial-services companies process millions of financial payment transactions daily, many across borders. Data-sovereignty regulations have introduced more complexity requiring some data to be managed and stored inland. Yet aggregated data can be utilized for global organization-level decision making, IPs, or value-added services like fraud modeling. How can global financial-services companies localize data to comply with countryspecific regulations while accessing and analyzing their valuable global data? The appropriate technology measures can help them remain compliant, while the right cloud solution can address both of these business demands. Unleash data with public cloud Snowflake Data Cloud is a global network where thousands of organizations mobilize data with near-unlimited scale, concurrency, and performance. Snowflake's platform is the engine that powers and provides access to the Data Cloud. The platform is built to utilize public clouds. The architecture separates data storage from data computing offering elastic scaling, usage-based per-second billing, and secure data sharing over a multi-cloud deployment. Snowflake's true separation of compute and storage, along with engineering for the service

layer, enables it to serve Data Warehouse, Big Data, Reporting, and Analytics applications over a public cloud. Public cloud natively lets organizations host data locally within a country, with security features that ensure compliance with local and international regulations. In addition to data localization, the Snowflake platform takes advantage of public-cloud capabilities and architecture to solve the complex processing and dataaccess issues like those described in the financial services example above. Snowflake can deliver these capabilities due to a layered architecture with three distinct components: 1. Snowflake virtual warehouse Snowflake virtual warehouses do not host data, but leverage a copy of data stored centrally for computing applications. This is key in separating data storage from data consumption. Each virtual warehouse performs its own computing without impacting others while accessing the same version of centrally stored data. And Snowflake virtual warehouses use public cloud compute infrastructure like AWS EC2, offering unlimited elasticity. 2. storage The Snowflake storage layer manages data centrally in a public cloud storage infrastructure like AWS S3 or Azure Blob. This layer offers data encryption, in motion and at rest, and it is not directly accessible to anyone. The data access is only offered via virtual warehouses. 3. Snowflake service layer The Snowflake service layer is most critical, as it is a single point of entry to the Snowflake system. It manages a complete system; captures metadata automatically; and performs service control, authentication, and authorization. The other two layers are governed and made available through this service layer, which is also responsible for features like data sharing. Snowflake offers several advantages for companies looking to leverage the public cloud: Snowflake solution architecture for global payments This high-level architecture strategy shows how Snowflake could be applied to address the data needs of a global financial services company. The Snowflake architecture opens the broader possibility of data sharing and monetization across partners, as both data providers and consumers, while ensuring that local regulations are followed. With a Snowflake deployment, this architecture requires only configuration no other complex engineering, architecture, or solution development. Best of all, it could be operational in a matter of days with continuous industryleading data security. Deploying a solution with traditional data technologies would require many months of engineering. Wipro-Snowflake partnership Wipro is an "Elite" global SI partner for Snowflake in cloud data warehouse services. Wipro offers a variety of services for the Snowflake data platform from architecture consulting, implementation, and migration to support. Wipro leverages the 500+ Snowflake consultant pool that includes more than 120 Snowflake-certified consultants. Wipro was named a Global Solution Partner for 2018 and 2019 with more than 35 implementations and the privilege to build connectors for Snowflake Mainframe and SAP BW. Looking for more information? Reach out to us at ask.analytics@wipro.com Sanjeev Mittal General Manager, Business Head - Data, Analytics & AI, Wipro Focusing on key industry sectors like Financial Services, Energy, and Utilities, Sanjeev helps clients leverage Data, Analytics, and Artificial Intelligence to drive digital transformation initiatives. He also nurtures alliance partners to deliver comprehensive ecosystem benefits to our clients. Sanjeev brings a broad perspective with 22 years of combined sales, solutions, and delivery experience. Deepesh K. Shrivastava Practice Director - Data, Analytics & AI, Wipro As part of Wipro Data, Analytics & AI Practice

# Programmable infrastructure - A reimagined future of innovation with limitless possibilities

----- Arcticle source ----- https://www.wipro.com/blogs/vasudha-mishra/ programmable-infrastructure-a-reimagined-future-of-innovation-withlimitless-possibilities/ ---- About the Author(s) Contact Wipro Please fill the required details to access the content Programmable infrastructure - A reimagined future of innovation with limitless possibilities February | 2021 As the application development space evolves, programmable infrastructure is opening up a new world of innovation with limitless possibilities. Today, enterprises are deploying a hybrid transformation strategy as a vital keystone for successful digital adoption, with programmable infrastructure (or infrastructure as a code) playing a critical role in making these strategies work in the real world. The adoption of hybrid cloud heralds the next generation of innovation for the developers community where they can conceptualize new applications that harness the power of cloud. Interestingly, this approach goes beyond as a service and self-service marketplaces which are already being adopted as a larger part of the nextgeneration cloud transformation journey. This new approach enables customers to fully digitalize the process for managing the entire lifecycle of infrastructure, while proving its viability and business value. It also helps to eliminate complex manual and error-prone systems with automation, minimize niche resource skills requirements and automate processes involving routine tasks. Here are 5 critical levers to be considered while designing the constructs for the programmable infrastructure framework: In conclusion, programmable infrastructure is a critical breakthrough and a technological disruption that the IT industry has already seen in the past. It also presents an opportunity to drastically change the perception of the infrastructure deployment process and eliminate the complexity of hardware. This will enable the speed and agility to align with fast emerging IT trends and will help the organization to be future ready. Vasudha Mishra Senior Practice Manager - Cloud Infrastructure Services, Data Center and Hybrid Cloud Practice, Wipro Vasudha is an IT Professional with over 15

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### 4 Key Success Factors for New Age B2B Customer Portals

---- Arcticle source ---- https://www.wipro.com/blogs/Vinay-Kavde/4-keysuccess-factors-for-new-age-b2b-customer-portals/ ---- About The Author Contact Wipro Please fill the required details to access the content 4 Key Success Factors for New Age B2B Customer Portals February | 2021 When B2B portals were launched, the focus was for business customers to place and track their orders easily, hence they were very transaction focused. Over the years, the B2B portals have evolved to provide a one stop shop for B2B customers. However, some B2B partners frequently highlighted challenges like: To address these challenges, B2B portals needed to evolve to provide end-to-end capabilities for their customers. Figure 1 details the key capabilities provided by B2B portals across their interaction lifecycle: The above capabilities help B2B interactions to: The 4 key success factors in enabling B2B portals include: Wipro has worked with some of the leading enterprises to provide advisory and implementation services for enabling customer portals. We work with customers across different segments like automotive companies, telecom, ingredient manufacturers, health & beauty companies, and other consumer product companies to evaluate their customer portal needs. We also have strong technology expertise and resources available to implement the required solutions. Vinay Kavde Consulting Partner Vinay Kavde is a consulting partner with Wipro and works with a portfolio of retail and consumer product clients in B2B and B2C ecommerce, omni-channel and supply chain.

#### CPG Pivot towards Direct-to-Consumer drives focus on Digital Distribution Centers

---- Arcticle source ---- https://www.wipro.com/blogs/Vinay-Kavde/cpg-pivot-towards-direct-to-consumer-drives-focus-on-digital-distribution-centers/ ---- About The Author(s) Contact Wipro Please fill the required details to access the content CPG Pivot towards Direct-to-Consumer drives focus on Digital Distribution Centers March | 2021 The market is seeing that the consumer

brands are increasingly pivoting to Direct to Consumer (DTC) model. This is seeing increasing demand for distribution centers (DC's) to support online fulfillment. These DC's require different perspective from operations, inbound, outbound, inventory management and logistics perspective than wholesale DC's. This article explores some of the practices in digital DC's supporting DTC growth. Online and omni-channel were retail buzzwords for over a decade and consumer brands observed these trends closely but treaded slowly. Some brands, especially in the apparel and fashion business started developing their direct to consumer (DTC) channel almost a decade back. COVID-19 pandemic has accelerated the Direct-to-Consumer business shift across all product categories. Some trends that point to this are: In DTC growth, there is focus on the front-end capabilities around content, personalization, improving customer experience, etc. but less attention on improving back-end fulfillment capabilities through distribution centers (DC), which is key to meeting the customer promise. For consumer product companies, DCs serving wholesale channels cannot be effectively used to support online orders due to very different order profiles, volumes, etc. The following are key practices for digital DTC DCs supporting consumer demand: Wipro is actively working with number of leading brands supporting their DTC digital distribution operations globally. We enable companies with number of leading WMS products including Manhattan Associates, Blue Yonder, SAP eWM, etc. We are happy to assist you in your DTC digital distribution journey. References Vinay Kavde Consulting Partner Vinay Kavde is a consulting partner with Wipro and works with a portfolio of retail and consumer product clients in B2B and B2C ecommerce, omni-channel and supply chain. Mallikarjun B Raddi Consulting Leader Mallikarjun B Raddi is consulting leader in the CPG consulting source ---- https://www.wipro.com/blogs/mayur-shah/ ---- Author's Post Contact Wipro Please fill the required details to access the content Mayur Shah Mayur Shah GM & Global practice head for Wipro's Data center business Mayur Shah is a GM & Global practice head for Wipro's Data center business. He is also a Distinguished Member - DMTS at Wipro. He has a track record of incubating and maturing emerging technology practices. In his current role his charter includes driving overall strategy and priorities at Wipro for DC practice. He has spent over 18+ of his 22 years' experience in Wipro being part of niche practices and offering. He has rich experience in strategy and operations entailing building the niche solution offering and new business development. Mayur's sound understanding of Infrastructure Technology Outsourcing (ITO) has helped Wipro acquire new business while handling many deals of varying sizes. He has broad exposure of developing solutions for several industry verticals in 

### What Have Hyperscalers Taught Us?

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required details to access the content What Have Hyperscalers Taught Us? February | 2021 Hyperscalers have exploited their agility and innovative strength to ensure excellent customer experience, using disruptive services and use cases. They have set new benchmarks in rolling out services that are ready for consumption by enterprises and organizations. Though these services come with discussions about data distancing and a lack of control, the sheer number of innovative services drive enterprises to adopt hyperscalers, albeit with caution. Organizations prefer a platform or framework that delivers the agility and innovativeness of cloud in rolling out services, yet ensures that data control and location is restricted within the boundaries of the on-premise data center. Such a solution is also useful to appease demanding customers, internal or external, who expect a cloud like experience, irrespective of the environment size or commercial feasibility, and do not want to get entangled with the complexities of infrastructure. These customers want an interface that provides them with innovative, ready to consume services, independence, and also understands their intent. Such an interface requires integration with a foundation that has the capabilities to anonymize underlying processes and technologies, build readily consumable services, and expose them for consumption by using simplified mechanisms such as APIs. Developing this foundation requires decades of understanding processes, technology, all possible scenarios of intent and interest, as well as the services that are of interest to customers. To meet these expectations, CIOs need a foundation that can extract three key capabilities from their IT estate: Delivering agility that is in line with that offered on public cloud requires a change management platform that is programmable, supports event driven scaling and onboarding of multiple data center technologies, and can deliver just in time deployment and autonomous operations. To achieve these objectives, organizations search for holistic tools that can enable and facilitate such a platform. But as data center industry reports indicate, tool vendors have historically focused on specific deliverables. As a result, enterprises spend on a plethora of tools, each of which is centered on a specific deliverable such as patching, monitoring, event management, etc. Some of these tools are necessary. But over time, the sheer numbers of tools purchased for gaining productivity becomes the reason for an unattractive spend to benefit ratio. This problem is further aggravated for enterprises when the need to spend for meeting regulatory and compliance requirements and managing within the boundaries of declining budgets becomes inclined towards RUN operations. Adopting and anonymizing modern technologies is not difficult because of their open architecture, but it is slowed down by the presence of legacy technologies. Organizations find it hard to maintain the required skill variations and still be productive, so they undertake cross skilling of resources. After a point, cross skilling becomes ineffective and skill maintenance costs start rising. This drives enterprises towards automation, but the usual methodology of adopting automation in silos fails to achieve the desired benefits. In addition, automation requires programming skills. Even if the underlying infrastructure is programmable, huge investments are needed to onboard, develop, and manage automation skilled resources, thereby aggravating the existing challenges associated with managing spend. Hence, there is an immediate need to establish a foundation that anonymizes underlying technologies, is innovative in creating apt services, prompt in rolling out ready to consume services, enables a symbiotic

existence between legacy and modern technologies, centralizes automation and orchestration, helps in managing spend, and delivers quantifiable achievements. Can there be a solution that helps achieve these objectives? What if there was a solution that saved spends on RUN and is economical enough to survive on those savings as well as build a foundation to facilitate a NextGen platform? Does such a solution exist? We shall delve more into this in the forthcoming blog- Imitating HyperScalers For On-premise And Hybrid Cloud Environments Adios! Mayur Shah GM & Global practice head for Wipro's Data center business Mayur Shah is a GM & Global practice head for Wipro's Data center business. He is also a Distinguished Member -DMTS at Wipro. He has a track record of incubating and maturing emerging technology practices. In his current role his charter includes driving overall strategy and priorities at Wipro for DC practice. He has spent over 18+ of his 22 years' experience in Wipro being part of niche practices and offering. He has rich experience in strategy and operations entailing building the niche solution offering and new business development. Mayur's sound understanding of Infrastructure Technology Outsourcing (ITO) has helped Wipro acquire new business while handling many deals of varying sizes. He has broad exposure of developing solutions for several industry verticals in both domestic and global market. =================

#### Imitating HyperScalers For Onpremise And Hybrid Cloud Environments

----- Arcticle source ----- https://www.wipro.com/blogs/mayur-shah/imitatinghyperscalers-for-on-premise-and-hybrid-cloud-environments/ ---- About The Author Contact Wipro Please fill the required details to access the content Imitating HyperScalers For On-premise And Hybrid Cloud Environments February | 2021 In the earlier blog, we saw that organizations have an immediate need to experience an innovative and agile rollout of relevant services, and CIOs need a foundation that can extract three key capabilities from their IT estate. In addition, we also understood that cross skilling has its limits and that an adoption of tools and automation don't benefit organizations if the methodologies used are not strategic. We were left pondering over a few key questions. Can there be a solution that helps achieve these objectives? What if there was a solution that saves spends on RUN, is economical enough to survive on those savings, and builds a foundation to facilitate a NextGen platform? Does such a solution exist? The solution: ServiceTheater ServiceTheater is designed to address the above challenges at a grass root level. It has been developed to function and deliver independently, as well as add strength and complement scenarios where automation tools exist. ServiceTheater was designed and developed with a clear goal to deliver solutions that CIOs and IT leaders can leverage to meet the challenges and objectives described above. Let us understand the methods that ServiceTheater uses to solve the above mentioned challenges. 1. Functional feature #1: API mediation layer (AML) A very important feature is the solution's ability to fire native APIs of target/

underlying technologies. An example of such an action would be triggering appropriate APIs of a CMDB software to make an entry about a freshly provisioned virtual machine. Once the API mediation layer is directed with the rules laid by the "Automation development engine" and the "Workflow orchestration engine", modulating legacy and modern technologies are no different. Therefore, the outcome and rollout of services that end users are interested in become the point of focus. In addition, this layer also modulates both legacy and modern technologies in similar ways by following rules laid down by the "Automation Development Engine" and the "Workflow Orchestration Engine", thereby facilitating and enabling enterprises to focus on the outcome, as well as roll out of services of interest to end users. 2. Functional feature #2: Automation development engine (AUTODEV) The automation Development engine facilitates the creation and versioning of automated artefacts with ease, and minimal knowledge about programming languages. Additionally, the automation development engine allows and facilitates a combination of artefacts to deliver new automation workflows that are suited for complex automation scenarios. These artefacts are graded as Frames, Scenes, Acts, and Plays. The artifacts graded as Play can automate the most complicated scenarios, such as Disaster Recovery-as-a-Service. 3. Functional feature#3: Workflow orchestration engine (WORE) The Workflow Orchestration Engine weaves artefacts that are developed using the Automation Development Engine into workflows. These workflows can be easily curated to deliver varied outcomes as per the needs of an organization. In addition, the Workflow Orchestration Engine allows sequencing, resequencing, and combiningworkflows with existing automation initiatives such as shell scripts, Python modules, etc. This enables the field force to reuse existing investments and deliver both simple and complex automation use cases with ease. The Workflow Orchestration Engine and the Automation Development Engine work in tandem to deliver cross tower automation and are a boon for systems and operations engineers. Organizations benefit from reduced cross tower handoffs and skill maintenance costs, and improved ticket resolution time. Now we know that ServiceTheater anonymizes both legacy and modern technologies with ease and helps CIOs and IT leaders to embrace both. It enables field officers to create, curate, edit, and reuse automation artefacts easily, with minimal programming knowledge. ServiceTheater can orchestrate and mix work flows to deliver complicated use cases of the highest order and complexity. It promotes and supports cross tower automation, thereby improving service provider SLA's and operational efficiencies. However, how will ServiceTheater be of use to an enterprise that has already invested in automation tools? How will it complement them? Will it not disrupt the existing ecosystem? As we said earlier, ServiceTheater was carefully planned, designed, and developed to meet the challenges, objectives and expectations of CIOs and IT leaders. We have a solution, and it will be interesting to find out how we implement it. We shall get to know more about this in the forthcoming blog- How HyperScalers Front End Applications and Configure Tools: With The Superpowers of ServiceTheatre Adios! Mayur Shah GM & Global practice head for Wipro's Data center business Mayur Shah is a GM & Global practice head for Wipro's Data center business. He is also a Distinguished Member - DMTS at Wipro. He has a track record of incubating and maturing emerging technology practices. In his current role his charter includes driving overall strategy

#### How HyperScalers Front End Applications And Configure Tools: With The Superpowers of ServiceTheatre

----- Arcticle source ----- https://www.wipro.com/blogs/mayur-shah/howhyperscalers-front-end-applications-and-configure-tools-with-thesuperpowers-of-servicetheatre/ ---- About The Author Contact Wipro Please fill the required details to access the content How HyperScalers Front End Applications And Configure Tools: With The Superpowers of ServiceTheatre February | 2021 It'sbeen weeks since we have been trying to assimilate an understanding about ServiceTheater. We've been talking about so many concepts and functions that it seems a recap will be a good way to start the final blog of this three part series. Recap rolls in 3...2...1. Hyperscalers have taught us that rolling out innovative services for enriching customer experiences is a key differentiator and demanding customers want a cloud like experience, irrespective of scale. CIOs need a foundation that meets customer demands by building three key capabilities on their IT estate: agility, adaptability, and controlled spend, and mitigates the challenges around tool sprawl, limitations of cross skilling, and siloed automation. ServiceTheater facilitates CIOs and IT leaders to meet the above objectives. However the guestions around complementing existing investments such as front-ending applications, and configuration tools still remain unanswered. The answer lies in functional features 4 and 5. 4. Functional feature #4: Service creation and accessibility ServiceTheater is a standalone programmable automation and orchestration platform, But it also bundles an out of box functionality that enables it to expose workflows as managed APIs for consumption by front ending applications such as Wipro Holmes, digital platforms, customer portals, etc. Interestingly, ServiceTheater also integrates with configuration software such as Ansible, Chef, etc. and use them productively. These integrations allow ServiceTheater to add strength and capabilities, and complement other investments made by customers. For a moment let us assume that Wipro Holmes is automating L1 tasks in an organization and we want to enhance Wipro Holmes and make it Holmes++, which is capable of delivering L2 and L3 level tasks. In such a scenario, we can deploy ServiceTheater, build workflows and expose them as managed APIs on the Holmes UI. As a result, customers and end users experience the same look and feel, but can now take advantage of the new enhancements

and empower themselves with the ability to perform L2 and L3 level tasks. 5. Functional feature #5: Foundation for autonomous operations AIOPS tools such as Servicenow Loom tightlyintegrate with ServiceTheater to manage events by triggering ServiceTheater to perform a task. As a result, incidents get proactively resolved, causing minimal disturbance to the end user. Autonomous operations are the future and the foundation of a marvelous customer experience. They reduce tickets, increase team efficiencies, facilitate focus on strategic tasks, and deliver enriched experiences for adopting ecosystems. All in all, ServiceTheater facilitates CIOs and IT leaders to meet the expectations of today's customers and lay the foundation for futuristic autonomous operations. It paves the way for NextGen offerings such as SAP HANA as a service, digital database platform services, cyber recovery, boundary less data management etc. Summarizing its key takeaways: You, my reader, may be surprised that you have been unaware about ServiceTheater's existence. But, as the saying goes, truth is stranger than fiction. For all of you who abide by the seeing is believing philosophy, and are yet to believe in the super powers of ServiceTheatre, we have a live environment where we walk the talk. To see the magic unfold, drop an email to mayur.shah@wipro.com. Mayur Shah GM & Global practice head for Wipro's Data center business. He is also a Distinguished Member - DMTS at Wipro. He has a track record of incubating and maturing emerging technology practices. In his current role his charter includes driving overall strategy and priorities at Wipro for DC practice. He has spent over 18+ of his 22 years' experience in Wipro being part of niche practices and offering. He has rich experience in strategy and operations entailing building the niche solution offering and new business development. Mayur's sound understanding of Infrastructure Technology Outsourcing (ITO) has helped Wipro acquire new business while handling many deals of varying sizes. He has broad exposure of developing solutions for several industry verticals in 

#### Be Prepared for a Ransomware Attack: Response and Recovery Simplified with Cohesity and Wipro

---- Arcticle source ---- https://www.wipro.com/blogs/mayur-shah/be-prepared-for-a-ransomware-attack-response-and-recovery-simplified-with-cohesity-and-wipro/ ---- About The Author Contact Wipro Please fill the required details to access the content Be Prepared for a Ransomware Attack: Response and Recovery Simplified with Cohesity and Wipro March | 2021 If there is one thing that keeps most IT practitioners up at night, it is the threat of ransomware. Ransomware and other cybercrimes are an increasing concern among enterprises. A report from Cybersecurity Ventures expects global cybercrime costs will grow by 15% annually over the next five years, reaching more than \$10 trillion by 2025. Ransomware attacks are inevitable. For CIOs and CISOs, the focus is not preventing them

but knowing how to respond when they occur. Ensuring robust data security and ransomware protection is a top priority, but organizations also need to consider how they will respond to an attack to minimize its impact and maintain business continuity. How can organizations protect valuable data without complicating operations? How do they recover lost data while minimizing disruptions? Who is responsible for maintaining data sovereignty and compliance requirements? How do you obtain, develop, and constantly refine the skills and resources (both human and technical) needed to tackle these daunting questions without incurring exorbitant recurring costs? With so many questions to consider and no one-size-fits-all solutions, ransomware response and recovery can be complicated — but it doesn't have to be. A bespoke solution to a complex problem To address this multifaceted issue, Wipro teamed up with Cohesity to offer a join ransomware service that enables customers to improve their security posture against cybersecurity threats while ensuring business continuity and disaster preparedness. Wipro Enterprise Recovery Vault powered by Cohesity pairs Cohesity's innovative data management solutions and cutting edge anti-ransomware capabilities with Wipro's strategic IT consulting services, API-based automation frameworks, and global reach. The result is the first GSI-managed end-to-end ransomware recovery service leveraging Cohesity data-protection software, and a glimpse of the powerful datamanagement services to come from the new Wipro-Cohesity alliance. The Wipro Enterprise Recovery Vault uses a holistic approach to address all aspects of ransomware response and recovery including human efforts, IT recovery and resumption processes, and the intelligent automation required for orchestrating appropriate actions post a cyberattack — all tailored to the organization's unique needs and delivered as a service. Organizations can access Cohesity's proven data protection and disaster recovery capabilities through the Vault for a truly customized white-glove service that protects against the costly disruptions of ransomware attacks. The Vault is also integrated with the Wipro Service Theatre automation framework for a seamless customer experience and accelerated time-to-market. Wipro Enterprise Recovery Vault powered by Cohesity protects against, detects, and rapidly recovers from ransomware attacks to reduce downtime and ensure business continuity through: When ransomware strikes, we've got you covered. No organization is immune to ransomware attacks, and the consequences — loss of revenue; increased time-to-market due to cybersecurity incidents, data corruption, operational disruptions — are major concerns for enterprises. Wipro Enterprise Recovery Vault powered by Cohesity helps address these concerns by improving readiness so businesses can respond to and recover faster from ransomware attacks. It also protects market and brand reputation, minimizes revenue loss, prevents penalization from regulators and enforcement authorities, and builds stakeholder confidence in an environment of increasingly sophisticated cyberattacks. Wipro and Cohesity customers can enjoy peace of mind knowing that they have not one but two trusted partners defending them against ransomware attacks. Wipro Enterprise Recovery Vault powered by Cohesity is available globally through Wipro via advisory-led engagements in flexible pay-as-you-grow commercial models including Capex, Opex, and utility-based pricing. Learn more about Wipro Enterprise Recovery Vault powered by Cohesity, or Cohesity's approach to countering ransomware Nikitha Omkar Sr. Solutions Marketing Manager Nikitha Omkar is an

experienced product marketing and sales professional and currently manages partner solutions marketing at Cohesity. She is passionate about simplifying technology and is always exploring new and innovative ways to make technology relevant, consumable and exciting for everyone. Mayur Shah GM & Global practice head for Wipro's Data center business Mayur Shah is a GM & Global practice head for Wipro's Data center business. He is also a Distinguished Member - DMTS at Wipro. He has a track record of incubating and maturing emerging technology practices. In his current role his charter includes driving overall strategy and priorities at Wipro for DC practice. He has spent over 18+ of his 22 years' experience in Wipro being part of niche practices and offering. He has rich experience in strategy and operations entailing building the niche solution offering and new business development. Mayur's sound understanding of Infrastructure Technology Outsourcing (ITO) has helped Wipro acquire new business while handling many deals of varying sizes. He has broad exposure of developing solutions for several industry verticals in both domestic and global market.

# Safeguard your ability to Recover from a destructive Cyber Attack with Wipro Cyber Resiliency Solutions

----- Arcticle source ----- https://www.wipro.com/blogs/mayur-shah/safeguardyour-ability-to-recover-from-a-destructive-cyber-attack-with-wipro-cyberresiliency-solutions/ ---- About the Author(s) Contact Wipro Please fill the required details to access the content Safeguard your ability to Recover from a destructive Cyber Attack with Wipro Cyber Resiliency Solutions May | 2021 Ransomware attacks on the Enterprise have proliferated over the last several years and now routinely target backup and recovery infrastructure. Resilience strategies need to be modernized for a stable defense against this new attack vector. Wipro Cyber Resiliency Solutions, powered by Dell Technologies, can protect your critical data with assured integrity and is essential to resuming normal business operations after a destructive ransomware attack. A solution with a tangible business outcome Wipro's Cyber Resiliency Solutions help enable enterprises to protect their critical data assets against cyberattacks. The strong solution integrates Dell EMC PowerProtect Cyber Resiliency Solution with CyberSense, which provides cyber resilience, automation, and integration with a security operation center, unified dashboard, forensic tools, and machine learning techniques. Wipro Service Theatre, the heart of the accelerator automating the Cyber Resiliency Solution, tightly integrates with various infrastructure components, north bound APIs, and plugins from different OEMs. Abstracted to deliver an agile and flexible orchestration layer, these elements form a single platform with comprehensive automation of required Day 0 to Day 2 tasks required for a complete lifecycle management. Wipro's Service Theatre also provides a suite of customized recovery and managed services

to provide a robust and secure environment with defined processes and procedures to recover data in case of a cyberattack so that your business as usual can resume quickly. Unique value differentiators for customers: Cyberattacks are designed to destroy, steal, or otherwise compromise your valuable data - including your backups. Protecting your ability to recover with assured integrity is key to resuming normal business operations postattack. Here are the primary building blocks of a proven and modern cyber resiliency solution: Mayur Shah GM & Global practice head for Wipro's Data center business Mayur Shah is a GM & Global practice head for Wipro's Data center business. He is also a Distinguished Member - DMTS at Wipro. He has a track record of incubating and maturing emerging technology practices. In his current role his charter includes driving overall strategy and priorities at Wipro for DC practice. He has spent over 18+ of his 22 years' experience in Wipro being part of niche practices and offering. He has rich experience in strategy and operations entailing building the niche solution offering and new business development. Mayur's sound understanding of Infrastructure Technology Outsourcing (ITO) has helped Wipro acquire new business while handling many deals of varying sizes. He has broad exposure of developing solutions for several industry verticals in both domestic and global market. Sivanessen Pillai Advisory Engineer | CTO Ambassador Dell Technologies Jason Tarlton Cyber Program Lead at Dell 

## Addressing the Next Big Puzzle for Application Agility in the DevOps Era with Distributed IT

----- Arcticle source ----- https://www.wipro.com/blogs/mayur-shah/ addressing-the-next-big-puzzle-for-application-agility-in-the-devops-era-withdistributed-it/ ---- About the Author Contact Wipro Related Blogs Optimizing Field services Through AR Transforming the leave-of-absence experience into an employee-retention tool A Smarter Way to Collaborate and Build Applications with Azure DevOps Please fill the required details to access the content Addressing the Next Big Puzzle for Application Agility in the DevOps Era with Distributed IT October | 2021 Digital transformation and end user experience drive businesses to innovate with new applications and enhance core applications flexibility. This is essential for responding to business opportunities and facing competitive threat in the current economy. Survival of the fittest requires an ability to change - to move quickly, adapt, and to seize opportunities. Modern infrastructure, data explosion, and cloud-native applications create significantly higher pressure on the data fabric and database layer. The responsiveness and security of the database determines the performance of the application. When multiple applications access the database with queries simultaneously, ageing databases growing across legacy infrastructure become the biggest hurdle. Core databases in traditional infrastructure often experience performance degradation because of capacity issues and end up in adding incremental storage resources to maintain the performance. The result: challenges to maintain

SLAs, contain costs of data management and slower business speed. The next sizeable area is to address the data fabric and database solution which matches the agility expectations of DevOps and application releases. Many high-performance databases today use a traditional multi-tier architecture. This implies that legacy compute handles some part of the overall workloads and storage. They often operate in silos, resulting in slow provisioning, inflexibility, poor automation, and complex (hence expensive) disaster recovery. Such fragmented data center (DC) operations also result in high maintenance and license cost and increased security risk. Managed database cloud services can bring in the required focus on automation, security, scale, and consolidation strategy. DB Platform as a Service (DBPaaS) provides easy and controlled access to databases with minimum administration costs. Cloud databases (DBs) enable organizations to focus on their business-critical applications while the vendor or communications service provider (CSP) manages the underlying infrastructure including performance, availability and security management. Is moving all databases to public cloud DB services the solution? This need to be addressed carefully. Gartner® report speaks eloquently on understanding cloud data management architecture and approach to decide the landing zone of the databases and data fabric. This leads to a critical IT architecture design consideration of interdependent applications exchanging data, data locality, latency study with location preferences, especially for geo regulations and compliances. It results in the need for hybrid data management architecture. The focus should be on adoption of architecture that delivers cloud experience, agility, and modern data management with cost-efficiency, data analytics, and SLAs. Organizations need a new, rightcloud, API-first, and application-first approach, even for database management, to thrive in this DevOps era. We have already seen the impact of Exadata consolidating Oracle instances in a private cloud on business outcomes, employee productivity, and instances consolidation. According to Oracle, 77% of global 100 enterprises have leveraged Exadata to deliver business agility. However, as per overall market share study by Enlyft, Oracle Exadata covers only 4% of the total addressable market. The rest of the DB engines such as MS SQL, Open-source databases can also run on similar cloud platforms. There is clear increase in cloud DB services with huge public cloud DBPaaS growth for Postgres, NoSQl and next-gen DBs while still leaving a large hybrid cloud market. When modernizing database architecture, organizations should evaluate whether the new database solution: Wipro's Digital Database Platform Services (DDPS) offers highperformance, scale-out environments and delivers heterogeneous database cloud environments. It supports key business goals such as highly responsive applications, accelerated time to market, and simplified data management. It delivers immediate cost benefits by consolidating multiple database engines on one platform, optimizing license costs, opportunity to migrate to open-source DBs like Postgres and better use of DBAs' time. By integrating Wipro's accelerators like ServiceTheatre™ in DDPS, it delivers autonomous operations and empowers the developers, DBAs and DevOps teams to perform overall process automation by easy API callable services. Intel innovation is multiplying solution effectiveness for the infrastructure refresh, cost optimization, transformation projects, and deployments specially for core IT and cloud use cases. The infrastructure solution powered by Intel innovation delivers agility, scalability, simplicity, and

operational efficiency. DDPS with Intel offers configurations using Intel Optane persistent memory, increasing both performance and memory capacity while maintaining data persistence, at a significantly lower cost than DRAM. Additional DB consolidation, enabling mission critical workloads are other benefits which we bring with this reference architecture. The competitive advantage for enterprises lies in speed and quality of innovation, data security, compliance, and developer productivity. A hybrid database cloud architecture that is fit for the new data, application and DevOps demands is a key aspect to achieve this. Organizations determined to thrive in the digital transformation and data-driven era need to invest in transforming their database estate on priority. Gartner Mind the Gaps in DBMS Cloud Migration to Avoid Cost and Performance Issues, Robert Thanaraj, Henry Cook, Rick Greenwald, September 10, 2020 GARTNER is a registered trademark and service mark of Gartner, Inc. and/ or its affiliates in the U.S. and internationally and is used herein with permission. All rights reserved. Industry: Mayur Shah GM & Global practice head for Wipro's Data center business Mayur Shah is a GM & Global practice head for Wipro's Data center business. He is also a Distinguished Member - DMTS at Wipro. He has a track record of incubating and maturing emerging technology practices. In his current role his charter includes driving overall strategy and priorities at Wipro for DC practice. He has spent over 18+ of his 22 years' experience in Wipro being part of niche practices and offering. He has rich experience in strategy and operations entailing building the niche solution offering and new business development. Mayur's sound understanding of Infrastructure Technology Outsourcing (ITO) has helped Wipro acquire new business while handling many deals of varying sizes. He has broad exposure of developing solutions for several industry verticals in both domestic and global market. In the evolving landscape of digital workplaces, efficient field service operations are critical in ensuring reduced downtime... appy employees usually stay at their jobs, frustrated workers often don't. Chief human resource officers (CHROs) tell us that the corporate leave of absence (LOA) process is one of the most common sources of employee frustration. Employees often rank their LOA experiences low on the satisfaction scale, using descriptors such as complicated, confusing, inconsistent, time consuming, and unresolved. In a world where business is evolving at the speed of thought, rapidly changing market conditions pose several challenges for enterprises across industries. www.wipro.com/blogs/muralikrishnan/ ----- Author's Post Contact Wipro Please fill the required details to access the content Muralikrishnan Muralikrishnan Domain Consultant, Transportation & Logistics, CBU Murali has 18 years of experience in IT encompassing various roles in delivery, presales, consulting, and operations. He has the expertise and in the transportation, retail, and eCommerce domains and experience in ocean/ marine transportation, manufacturing, production, and process engineering.

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#### Smart Ports for Resilient Supply Chain

----- Arcticle source ----- https://www.wipro.com/blogs/muralikrishnan/smartport-for-resilient-supply-chains/ ---- About The Author(s) Contact Wipro Please fill the required details to access the content Smart Ports for Resilient Supply Chain March | 2021 Many port operations are still dependent on manual, paper-based systems. But with the increasing growth in global trade, the shipping industry is beginning a significant digital shift. New technology initiatives are helping many ports transform their operations - from containerization, cargo handling, and electronic data interchange, to port operations, decarbonizing logistics, and safety engineering - into a "smart port." A port is considered "smart" by eliminating siloed, manual operations and embracing paperless, clean, and connected supply chains to achieve operational efficiencies. Smart ports use many new technologies to achieve automation. To ease transitioning to a smart port, consider starting with these smart technologies: automated communications, data analytics and smart data, robotic smart devices, and automated risk mitigation. These technologies will improve management of all operations and logistics, increasing the resiliency of the supply chain. Automating Communications to Improve Logistics Port authorities, carriers, and freight forwarders can improve their logistics with the ability to continuously view the progress of a shipment. Leveraging 5G for enhanced communication automation results in efficient high-volume data exchanges of vehicle-to-vehicle and vehicle-to-port communications that happen across and throughout port-centric logistics activities. Further, adding blockchainenabled digital containers to the network will provide access to secure data in real-time. Utilizing these digital communication collaboration platforms will facilitate real-time freight bookings, provide freight location and price visibility, improve loading and unloading of cargo and containers, save time with paperless customs clearance, provide real-time traffic information to drivers, and manage port gate security. Use Smart Data for Optimized Operations and Better Visibility Data analytics play a key role in cargo capacity planning and enhanced operational decision making. Smart data from connected containers allows optimization for transport routes and modes to seamlessly improve container flows. 'Using sensors and IoT technologies can provide complete visibility on the state of goods en route, digitizing shipping-berth allocation and yard space, along with efficiently using automated guided vehicles, helps port and terminal optimization by providing 100% location visibility of all goods. But smart data improvements don't end there. Smart data can track energy efficiency, recycling of residual materials and the data collected on sustainability metrics like carbon accounting, carbon disclosure in line with IMO regulations and taking appropriate actions is important and significant. Automate Asset Management to Improve Preventive Maintenance The shipping industry is extremely asset intensive. Port assets are difficult to manually inspect and monitor for periodic preventive maintenance. Enterprise Asset Management (EAM) software can play a pivotal role in the maintenance and

manufacturing of critical assets in marine workshops, shipyards, and construction sites located in and around ports. EAM software can provide real-time data on every asset, which can then be used to automate the asset-maintenance schedule. 'Including unmanned technology (drones) for automated inspection routines can add tremendous value to the port environment by improving safety, reducing costs, and allowing greater survey frequency. The data collected through the automated drone inspections can also be passed to the asset-management team for maintenance reporting and planning. Risk Mitigation Automation to Prepare for Future Disruptions Supply-chain management risk identification is an ongoing exercise for any enterprise. It is critical for businesses to monitor their supply chains and mitigate risks wherever possible. Automating risk mitigation enables supply-chain leaders to plan for disruptions and regularly test global supply chains, which is key to long-term resilience. Mitigation measures must be taken for all known and unknown controllable risks, with both a short- and long-term perspective. These risks include port operational delays, natural disasters, epidemics, etc. Stress-testing the supply chain is an effective way of identifying and understanding the prevalent gaps. This can have a positive impact on intermodal transport, connections to remote locations, and port-centric logistics that are critical from an end-to-end supply chain standpoint. Smart Port Technologies Provide Seamless Automation Ports becoming smart is a pivotal evolution for global commerce. Smart ports move goods in a seamless manner through automation in a connected digital network. Introducing smart-port technologies can enable real-time visibility of shipments, track and trace capabilities, paperless operational processing, and more. While there are many new digital disruptors for progressive ports, starting with these smart technologies can ease a smart port transition. References: Muralikrishnan Domain Consultant, Transportation & Logistics, CBU Murali has 18 years of experience in IT encompassing various roles in delivery, presales, consulting and operations. He has expertise and in the transportation, retail, and ecommerce domains and experience in ocean/marine transportation, manufacturing, production and process engineering.

## Cyber threat hunting and response in multi-cloud at Formula One speed

----- Arcticle source ----- https://www.wipro.com/blogs/allen-stanley-jones/ cyber-threat-hunting-and-response-in-multi-cloud-at-formula-one-speed/ -----About the Author Contact Wipro Related Blogs Risk in the ESG Age Exchange of Cyber Threat Intelligence Among Peers Using Decentralized Identity Networks and IoFT Cybersecurity through collaboration Please fill the required details to access the content Cyber threat hunting and response in multi-cloud at Formula One speed March | 2021 "Data is the pollution problem of the information age, and protecting privacy is the environmental challenge" - Bruce Schneier Cybersecurity in a multi-cloud environment has become more challenging than ever. Cloud-native technologies have added to the prevailing complexities. Threats, such as account takeover, defacement, and doxing, are still very relevant. In the recent Security trends by Industry for BFSI published in State of Cybersecurity Report 2020, 74% said a bad cyber event causes damage to brand reputation. In Healthcare & Life sciences, 71% said that a breach related to peer/competitor is the reason for an increase in budget allocation, and 44% agreed that security orchestration and automation is a top priority. According to Gartner, "Too often, container workloads are deployed without adequate runtime protection. "This article discusses what it takes to propel threat hunting and response in a multi-cloud environment. Multi-cloud makes it complex Security in the Cloud is the responsibility of the customer as per the shared responsibility model. For example, Cloud customers are responsible for controlling access, logging, and monitoring all customerdeployed instances in the Cloud and retaining an audit trail for a specified duration to meet regulatory requirements. These logs must be immediately available for analysis. In a cloud-native environment, native Kubernetes logs are not persistent. When a pod is restarted, logs and the archives associated with that pod are lost. If a pod is deleted from the node, all corresponding containers and their logs are also deleted. Unless a central log management system is maintained, all the logs are lost. Even when a container security tool is used, events of interest from multiple clouds must be federated to a centralized data lake for analysis, detection, and response. Hundreds and thousands of terabytes of enterprise security telemetry are generated on an ongoing basis in an enterprise. For example, an endpoint detection and response tool generates more than 30 megabytes of data per endpoint per day. This multiplied by the number of endpoint devices in an organization makes it an immense volume of data. Additionally, the data from firewalls, authentication sources, flow-logs from multiple-clouds, DNS, DHCP, traffic management, proxy, and several other tools are pumped into the data lake. Identifying threats and proactively hunting at top speed from this massive volume of data is like winning a race. Modus operandi of the adversary Dark Web 201 provides a glimpse of the culture, operating principles, and types of markets in the adversary community. A good understanding of their modus operandi helps design a proactive security strategy and stay ahead continuously. Per the #SOCR, the consumer industry's security trends show 70% of respondents participate in cyberattack simulation exercises coordinated by a third-party service provider. Modern tools for faster detection, hunting, and response The maximum capacity of the appliance and the speed of detection have been the bottlenecks of the past decade. This paradigm has changed completely with virtually infinite capacity and search speeds increasing by a few hundred times. The toolset used for this purpose should be scalable, flexible to accommodate new rules, and must be aligned to an industry-standard framework, such as MITRE ATT&CK. The tactics and techniques representing the MITRE ATT&CK® Matrix for Enterprise include techniques specific for major Cloud providers. Out of the box playbook tasks must be complemented with further workflows explicitly tailored for the environment's need. Multi-skilled teams take the chequered flag The

proliferation and sophistication of easily accessible tools and techniques make the circuit wet and foggy. It may not be pragmatic to master all the features of cyber-tools available in the public repositories. The skill required for detection, tuning, malware analysis, honeypots and deception, identifying indicators of compromise, application security, proactive hunting, cloud security, although inter-related, are discrete. Offensive cyber capabilities are highly technical, and building these skills, although timeconsuming, is crucial. Rome wasn't built in a day either. The ability to identify a threat quickly, drive to explore new tools, exposure to the security world, a willingness to wear different hats, and leveraging AI to make informed decisions, are essential skills. Access to a multi-cloud lab environment where the functionality of these restricted (potentially harmful if uncontrolled) tools could be mastered helps the team stay ahead of the contender consistently. This will also help expand the depth and breadth of the team's cloud and cybersecurity expertise, enabling them to contribute to the larger cyber community and take the chequered flag. References Industry: A tidal wave of ESG regulations is looming across markets. To prepare, companies are shifting responsibility for sustainability management and reporting to the risk management domain. Risk executives are investing in enhancing their governance, risk management, and compliance (GRC) systems to account for ESG factors. The ability to exchange cyber threat intelligence (CTI) in privacy preserving and in a secure manner is vital for enterprises to manage their security risks effectively. During the pandemic, dependence on digital technologies has seen unprecedented growth. From managing remote workforces to catering for changing customer expectations, the paradigm shift towards digital has brought a host of ----- https://www.wipro.com/blogs/shashi-sinha/ ----- Author's Posts Contact Wipro Please fill the required details to access the content Shashi Sinha Shashi Sinha Product, Technology & Transformation, Digital Operations & Platforms, Wipro Shashi Sinha has over 18 years of professional services experience in various roles in implementation, services delivery, consulting, pre sales, operations in the Expense Management Domain. Shashi has worked with many Expense Management Products over these years. Apart from his portfolio of core responsibilities, he has worked with large global enterprise clients and played an active role as a consultant during their transformational journey while automating and implementing expense management solutions. You can reach him @ shashi.sinha1@wipro.com ==============

# Go digital, eliminate paper and reduce carbon footprint - Enable a faster reimbursement process for your employees

---- Arcticle source ---- https://www.wipro.com/blogs/shashi-sinha/go-digital-eliminate-paper-and-reduce-carbon-footprint-enable-a-faster-reimbursement-

process-for-your-employees/ ---- About the author Contact Wipro Please fill the required details to access the content Go digital, eliminate paper and reduce carbon footprint - Enable a faster reimbursement process for your employees April | 2021 To reduce the carbon footprint and protect the environment, companies are moving towards a completely paperless system and embracing the digital platform to automate their travel and expense (T&E) system. It helps in saving time and mitigating employee fatigue in managing paper receipts and filing expenses. But the bigger challenge comes when receipts are lost. As per a global study, companies are heavily impacted when employees lose paper receipts or submit expense reports without receipts: 53% of small businesses, 49% of mid-sized businesses and 48% of large enterprises. Disadvantages of a manual paper-based system Time consuming and cumbersome It is extremely time consuming and cumbersome to manage paper receipts. The process from submission to auditing reports to processing reimbursements becomes too cumbersome. Manual check and poor policy compliance It is challenging to manually check all receipts for policy compliance. There is always room for error and audit risk. Duplicate and fraudulent claims A manual system cannot fully check all receipts to track duplicate claims, thereby increasing the chances of duplicate claims. Paper and maintenance cost The cost of paper, toner, files etc. becomes a substantial expense in any manual paper-based system. Insufficient data for analysis There is only so much that can be tracked for reporting and analysis. There are other valuable and informative data that could be required to provide extremely valuable insights. Automated receipt captures eliminate paper from the entire equation and employees do not need to spend hours in managing receipts and creating reports. Expense reports are now submitted within a couple of minutes and with fewer clicks. With digital paperless system, the process can now be completed within minutes. Advantages of a digital paperless system Time saving The paperless 'capture and submit' system allows employees to capture receipts images and submit expenses on the go. Automated policy check Companies can use flexi-fields to capture additional details that could be required to audit receipts and track expenses that are non-compliant. Highlight duplicate and fraudulent claims The system can easily track duplicate or fraudulent claims and highlight them as they are submitted through the system. Zero paper and maintenance cost The cost of printing and managing receipts could be brought down to zero depending on the degree of automation. Digital copies Since digital receipts could be stored and saved forever, companies can review them whenever required for any taxation needs. Greater insights into company spend Companies can use the digital receipts to capture and track all the data available for effective analysis. Mobility and advanced OCR technology Mobile solutions with advanced OCR technology make the entire process extremely simple and intuitive. Automated expense creation Capturing receipts to automatically populate expenses and capture any non-compliant expense becomes very easy. Shashi Sinha Product, Technology & Transformation, Digital Operations & Platforms, Wipro Shashi Sinha has over 18 years of professional services experience in various roles in implementation, services delivery, consulting, pre sales, operations in the Expense Management Domain. Shashi has worked with many Expense Management Products over these years. Apart from his portfolio of core responsibilities, he has worked with large global enterprise clients and played an active role as a consultant

### How to leverage automation to centralize policies and foster effective control

----- Arcticle source ----- https://www.wipro.com/blogs/shashi-sinha/how-toleverage-automation-to-centralize-policies-and-foster-effective-control/ -----About the author Contact Wipro Please fill the required details to access the content How to leverage automation to centralize policies and foster effective control April | 2021 An effective travel & expense policy is extremely critical not just to control the overall T&E cost but also to set clear and transparent guidelines regarding all the allowable and nonallowable expenses. This helps companies set proactive measures to manage and control T&E costs along with defining employees' travel experience and safety. Benefits of automating and centralizing policies Optimize cost efficiency As a SaaS product hosted on the cloud, it does not require any investment for physical infrastructure and maintenance, thereby reducing the overall cost. The platform simplifies the expense management process and reduces the overall processing cycle time. Increased overall compliance and accountability Centralization of company policy through automation fosters real-time tracking of the spend without any manual intervention. The system automatically tracks the compliant and non-compliant expenses and routes any expense that needs any exceptional approval. Clearly defined corporate policies help companies take a preventative rather than a detective monitoring and policy enforcement approach. An automated policy & compliance check enables easy fraud detection. 100% audit highlights duplicate claims, bookings or any other claims that are noncompliant and route them for policy violation in the approval workflow. Transparent and simplified T&E policy A fully integrated, automated and centralized system with in-built T&E policies not only ensures consistency within the organization but also enables employees to book as per their eligibility. A simplified fully centralized system provides a single platform for all users to manage all their T&E requirements right from travel planning till reimbursement. Automating finance back office audit activities ensures that all policies are managed by the system and all compliances are effectively checked with no manual intervention. It gives complete visibility into the company-wide T&E expenses for effective management and control. Enhanced employee satisfaction and productivity An automated system empowers travellers and gives them the control to manage their own travel. Reduction in the time spent in booking and submission of expense reports reduces the overall reimbursement cycle. A seamless system reduces the employees' efforts, thereby improving productivity and efficiency. Employees, admin personnel and finance teams would spend much lesser time in managing the T&E activities than they would have in the legacy system. Automated receipt captures eliminate paper from the entire

equation and employees do not need to spend hours in managing receipts and creating reports. Expense reports are now submitted within a couple of minutes and with fewer clicks. With digital receipts and a completely paperless system, what would have taken a couple of hours can now be completed within minutes. With all policies in-built, the need to audit reports is also reduced drastically as the system checks for all non-compliant expenses. Use of artificial intelligence (AI) to audit expense reports and receipts AI can be leveraged to audit expense reports and receipts in realtime to track errors and fraud. Safety and security Duty of care is extremely critical and nothing is more important than employees' safety and security. A completely automated system with integrated policies decreases the risk for corporate travellers. With reliable vendors mapped into the system, employees book only company preferred hotels and other services, thereby ensuring safe travel. Newer technologies like risk management system can track high-risk areas and in the event of any unfortunate unforeseen situation, can even help companies interact with their employees to ensure their safety. Shashi Sinha Product, Technology & Transformation, Digital Operations & Platforms, Wipro Shashi Sinha has over 18 years of professional services experience in various roles in implementation, services delivery, consulting, pre sales, operations in the Expense Management Domain. Shashi has worked with many Expense Management Products over these years. Apart from his portfolio of core responsibilities, he has worked with large global enterprise clients and played an active role as a consultant during their transformational journey while automating and implementing expense management solutions. You can reach him @ source ----- https://www.wipro.com/blogs/venkatesh-ampolu/ ----- Author's Posts Contact Wipro Please fill the required details to access the content Venkatesh Ampolu Venkatesh Ampolu Venkatesh Ampolu is as seasoned IAM Practitioner in our Wipro CRS IAM Consulting team. He has 14+ years of experience in contributing various Cybersecurity services (Consulting, Implementation and Support) to our esteemed clientele. He can be reached 

#### Detective and Preventive controls for cyber-attacks like Solorigate with IAM tools

---- Arcticle source ---- https://www.wipro.com/blogs/venkatesh-ampolu/detective-and-preventive-controls-for-cyber-attacks-like-solorigate-with-iamtools/ ---- About The Author Contact Wipro Related Blogs Risk in the ESG Age Exchange of Cyber Threat Intelligence Among Peers Using Decentralized Identity Networks and IoFT Cybersecurity through collaboration Please fill the required details to access the content Detective and Preventive controls for cyber-attacks like Solorigate with IAM tools March | 2021 The cybersecurity industry was deeply shaken by the Solorigate attack, the impact of which is still being felt in the cybersecurity space. Several companies have already started addressing this challenge

with their product suites. This particular attack will have a ripple effect in the upcoming quarters and highly influence the service industry market; especially the identity and access management (IAM) service industry. In this blog, we have analyzed this attack and presented some tips on preventing or containing the impact using IAM tool set. Attack over SolarWinds vulnerability (Solorigate / Sunburst / Sophisticated Golden SAML attack) Source of the attack: Trojan code in Orion Software (network monitoring tool) from SolarWinds Attack vector: Active directory, thereby anything on premise network and can extend to services in the cloud or the software supply chain Impact: As per New York Times, 250 organizations may have been impacted with this vulnerability Attack description: With a Trojan inserted in one of the patches on Orion software in the month of March 2020, hackers could get hold of the domain controller, ADFS (a critical asset of an enterprise) and could compromise the SAML signing certificate. Once this is accomplished, the adversary creates unauthorized but valid tokens and presents them to services that trust SAML tokens from the environment. Further, they can exploit the whole network (both onpremise and cloud). How it came into the limelight: FireEye, a cybersecurity company, brought this to attention when one of its users was called for Multi-factor Authentication (MFA) registration during a hacker attempt of lateral movement. How can such an attack be mitigated with an IAM toolset Since identity is the new perimeter, proper implementation of IAM tool set plays a vital role in preventing / eliminating cyber-attacks of an enterprise. Enterprise must focus on implementing the solution by following the security standards, frameworks offered by industry bodies such as NIST (National Institute of Standards and Technology), CSA (Cloud Security Alliance), NCSA (National Cyber Security Alliance), ISACA (Information Systems Audit and Control Association), Information Systems Security Certification Consortium, Inc., (ISC) etc. We (Wipro) as recognized by leading research and analyst firms such as Gartner, Forrester, IDC, Everest Group, HFS Research, ISG, NelsonHall, are here to partner with you in establishing preventive and Detective cyber security controls by following the security standards, Zero Trust Strategy, Security by Design principles and Defense in Depth Practices. Industry: Venkatesh Ampolu Venkatesh Ampolu is a seasoned IAM Practitioner in Wipro Cybersecurity IAM Consulting team. He has 14+ years of experience in contributing various Cybersecurity services (Consulting, Implementation and Support) to the esteemed clientele. He can be reached at ampolu.venkatesh@wipro.com. A tidal wave of ESG regulations is looming across markets. To prepare, companies are shifting responsibility for sustainability management and reporting to the risk management domain. Risk executives are investing in enhancing their governance, risk management, and compliance (GRC) systems to account for ESG factors. The ability to exchange cyber threat intelligence (CTI) in privacy preserving and in a secure manner is vital for enterprises to manage their security risks effectively. During the pandemic, dependence on digital technologies has seen unprecedented growth. From managing remote workforces to catering for changing customer expectations, the paradigm shift towards digital has brought a host of ----- https://www.wipro.com/blogs/vikas-goel/ ----- Author's Posts Contact Wipro Please fill the required details to access the content Vikas Goel Vikas Goel Partner & Practice leader (Wipro AWS Business Group) Responsible for

### Containerization at Scale with Red Hat OpenShift Service on AWS (ROSA)

----- Arcticle source ----- https://www.wipro.com/blogs/vikas-goel/ containerization-at-scale-with-red-hat-open-shift-service-on-aws-rosa/-----About the Author Contact Wipro Please fill the required details to access the content Containerization at Scale with Red Hat OpenShift Service on AWS (ROSA) March | 2021 Enterprises have been looking for solutions to digitally transform themselves to excel on customer expectation and improve on efficiency and agility. The challenge CIOs are facing is that there is no single solution that exists to undertake this journey at the enterprise level. Different technologies provide solutions in varied shapes and forms with their own advantages and disadvantages. Digital transformation is often centered on the cloud as a way to bring multiple technologies together to deliver a holistic ecosystem for digital enterprises. Over time CIOs have chosen technology platforms after stringent organizational compliance and review processes. They have invested resources and time to get these platforms certified for usage for their organization's business and technical needs. It would be unfair to expect that the workloads running on a certified platform be re-written, re-architected and re-certified just for cloud migration. This might defeat the entire purpose of migrating to cloud due to higher TCO and time loss in recoding and certification. Therefore, the need of the hour is to have proven technology platforms integrated with cloud for more seamless migration at scale. AWS and Red Hat have been at the forefront for this change and constantly innovating to bring multiple technologies with seamless integration to cloud platforms. One such service recently unveiled is Red Hat OpenShift Service on AWS (ROSA). ROSA provides an option that reduces hassles associated with moving containerized Red Hat OpenShift workloads to AWS. Wipro has been driving the cloud-based modernization continuum (Rehost to Cloud native to Serverless), and with ROSA being offered as a service, a significant portion of the journey is abstracted. It provides the power of OpenShift to make it cloud independent but with your preferred cloud as AWS. This will further be fast tracked by Wipro's proprietary modernization and migration toolsets across the application landscape. It provides a massive push to organizations whose private cloud is running on OpenShift to adopt a hybrid cloud strategy without changing their underlying deployment stack and deployment pipelines and reap the benefits based on a pay-as-you-go model. Wipro collaborates with both AWS and Red Hat to provide end-to-end support in adopting hybrid cloud strategies. Wipro will help customers devise faster cloud migration paths to migrate existing OpenShift workloads leveraging ROSA without investing too much time on recoding and rearchitecting. Customers can benefit by having access to a host of native services from AWS to enhance their application efficiency and capabilities at

lower cost. Wipro's C3 Modernization offers proven tools and methodologies to help fast track the migration of workloads to the ROSA. The C3 model built on Wipro's Cloud Studio offers pattern-based toolkits to speed up legacy workload migrations and streamline container-based, cloud-native development. Vikas Goel Partner & Practice leader (Wipro AWS Business Group) Responsible for driving go-to-market for new strategic offerings and competency and solutions on AWS Jagadeesh Parachur Chengalvarayan Consulting partner for Cloud offerings Responsible for pre-sales and go-to-Arcticle source ----- https://www.wipro.com/blogs/harpreet-arora/ -----Author's Posts Contact Wipro Please fill the required details to access the content Harpreet Arora Harpreet Arora Global Head of BFSI and Manufacturing Consulting Services Harpreet is the Global Head of BFSI and Manufacturing Consulting Services at Wipro. As a part of the leadership team, Harpreet has global responsibility for overall strategy, consulting, research & insights and M&A, supporting Wipro's global suite of BFSI and Manufacturing clients in their transformation agenda. He brings strong credentials in providing strategic, innovative and transformational solutions to a number of large, complex relationships, and has been instrumental in leading some of the big-ticket deals in the industry over his career. He can be reached out at harpreet.arora@wipro.com

### How Can Capital Markets Players Win the Game of PMI Through Successful IT Integration?

----- Arcticle source ----- https://www.wipro.com/blogs/harpreet-arora/howcan-capital-markets-players-win-the-game-of-pmi-through-successful-itintegration/ ---- About The Author Contact Wipro Please fill the required details to access the content How Can Capital Markets Players Win the Game of PMI Through Successful IT Integration? April | 2021 In our recent report, we highlighted that the capital markets sector is witnessing a strong upward trend in M&A activity: aggregate deal value has more than doubled, from \$48 billion in 2015 to \$105 billion in 2020. In fact, despite the economic impact of covid-19 pandemic, the year 2020 witnessed the highest aggregate as well as the largest average deal value in the last five years. It's clear that capital market players are using M&A as an integral part of their corporate strategy. While board members and shareholders are approving these deals, they also have soaring expectations. In fact, CXOs have ever higher stakes to ensure that the intended synergies from the deal are realized within the planned timeframe. This makes it imperative for leaders to focus on the key value-creation activities across the deal life cycle. Interestingly, synergies are only estimated, and not realized, during the target identification and due diligence stages of the transaction. It is the PMI phase where the synergies are actually identified and realized. In our analysis of the situation, we found that among the key elements of PMI, information technology (IT) enables more than half of the synergies directly

or indirectly. Hence, it is critical to understand how to get the best out of your IT integration. IT Levers to Maximize Integration Value IT is critical to virtually every operational process in the capital markets sector, including customer onboarding, pre-trade analytics, order management, matching and netting, trade execution and settlement, custody, payment processing, and fund analytics. IT also plays a critical role in key functions such as data management and compliance. This indicates a strong opportunity to enhance technology capabilities and further optimize operations by embedding IT value-creation levers in the integration process. These levers ensure that maximum value can be unlocked from PMI within planned timelines: Figure 1: Key IT Value Creation Levers to Maximize the Value of PMI A Structured Approach Makes all the Difference A theoretical understanding of IT value creation levers does not suffice. It is imperative to take a well-planned, systematic approach to the challenge and on-board skilled resources with hands-on IT integration experience at each stage of the deal lifecycle: Figure 2: Structured approach to IT Integration across the Deal Lifecycle IT integration is no less than the game point to make the PMI journey a successful one. Done well, it can be a source of tremendous synergies and help maximize the enterprise value of your organization. Harpreet Arora Global Head of BFSI and Manufacturing Consulting Services Harpreet is the Global Head of BFSI and Manufacturing Consulting Services at Wipro. As a part of the leadership team, Harpreet has global responsibility for overall strategy, consulting, research & insights and M&A, supporting Wipro's global suite of BFSI and Manufacturing clients in their transformation agenda. He brings strong credentials in providing strategic, innovative and transformational solutions to a number of large, complex relationships, and has been instrumental in leading some of the big-ticket deals in the industry over his career. He can be reached out at harpreet.arora@wipro.com Supported by: Pradeep Agarwal (Senior Manager - Wipro Insights) Agam Sehgal (Assistant Manager - Wipro 

### Hyper-personalization: a defining competitive edge in Financial Services

---- Arcticle source ---- https://www.wipro.com/blogs/harpreet-arora/hyper-personalization-a-defining-competitive-edge-in-financial-services/ ---- About The Author Contact Wipro Please fill the required details to access the content Hyper-personalization: a defining competitive edge in Financial Services May | 2021 As the world gets increasingly digital and connected, business value-chains are becoming more data driven. The intersection of data revolution and evolving customer preferences create a sizeable opportunity for Financial Services (FS) firms and will also drive the next phase of growth. It is imperative for FS firms to establish a stronger emotional connect with their customers, not just to create a good first impression but for a lasting relationship. The focus must shift from KYC (know your customer) to UYC (understand your customer). Thanks to the

data revolution and new age technologies like AI/ML and advance analytics, it is now possible for companies to understand what their customers truly want, when they want and provide services to their liking. A superior customer engagement is not just about creating a cutting-edge online and mobile platform however, it is shaped by consistently delivering an impeccable customer experience across every customer interaction. The experience should be seamless, especially on journeys that are more likely to take place over multiple channels, such as new account opening, financial advice, or issue resolution. Thus, having a single view of customer is a key requirement and critical to deliver real-time personalization, which we call as 'hyper-personalization'. What is Hyper-personalization? Hyperpersonalization is an advanced and real-time personalization. Armed with contextual data, it leverages advanced analytics and AI with new approaches to segmentation and real-time interaction to deliver complete individualization. For eg. a bank offering a car loan to its client who recently took a test drive or an insurer offering pay-as-you-drive auto insurance policy with dynamic pricing. Fig 1: representation of hyper-personalization Meanwhile, hyper-personalization is not just big-data, it moves beyond 'datadriven' to 'analytics-driven' with a focus to better understand customers emotional state and the context behind it and responding/nudging suitably. The ability to leverage emotionally intelligent nudges in real-time will be one of the biggest, most important opportunities for FS firms going forward. Hyper-personalization as a competitive edge As FS industry become increasingly commoditized with margins coming under significant pressure, it becomes imperative for FS firm to better understand their customers. Understanding not only transactions but also financial needs, goals, and behaviors creates financial solutions that are both relevant and timely. This knowledge (data) also enables superior engagement across channels and forms the bedrock for hyper-personalization at scale. If done properly, hyper-personalization enables FS firms in elevating customer loyalty and engagement. The existing customer base also act as an engine of advocacy to potential buyers. Overall, hyper-personalization increases the potential to realize market leading revenue growth, while remaining nimble and cost efficient. FS firms that create and implement hyper-personalization strategies will be able to keep up with the increasing demands of consumers while staying ahead of their competition. Future view: FS as a platform The ongoing trend towards Platformization of Financial Services and subsequent change in business models like 'banking-as-a-platform' are creating exciting new ways to grow revenue streams, attract new customers and transition to adjacent industries. As the financial product is becoming less important than customer, BFSI firms are embedding payments, loans, insurance and wealth directly into the customer experiences. Fig 2: Customer contexts around various financial products Banking: For many banks, the vision is to move beyond banking to cater to overall financial wellbeing model, and bringing the marketplace of customized financial products across banking, wealth, insurance, utilities, etc. on a unified platform with a single-view for customers. Capital markets: Some asset managers (AM) have already rolled out hyper-personalized offerings for their high net worth clients, powered by advanced analytics, machine learning, behavioral sciences, and sentiment analysis. These include, among other things, bespoke risk profiles, personalized portfolio construction and tailored nudges. AMs are now advancing towards offering hyper-personalization to retail customers as

well, through rapid deployments of AI backed robo-advisors. Insurance: Insurers have been one of the most prolific adopters of connected devices, leveraging it to launch shared-value insurance products and 'pay as you live' kind of offerings with dynamic pricing. Many large insurers have initiated or are part of cross-sector wellness ecosystems, where they gain multitude of insights into a customer, and are able to provide custom covers across their spectrum of risks. Overall, the industry is moving to different value propositions: from 'product based' to 'subscription based' and 'wellness ecosystems'; and from 'static assessment and offers' to 'real time prescriptive analytics and nudges' aka hyper-personalization. Find out more in Wipro's new report on hyper-personalization, in which we examine the changing landscape of customer engagement in the financial services space, along with imperatives for incumbents. Harpreet Arora Global Head of BFSI and Manufacturing Consulting Services Harpreet is the Global Head of BFSI and Manufacturing Consulting Services at Wipro. As a part of the leadership team, Harpreet has global responsibility for overall strategy, consulting, research & insights and M&A, supporting Wipro's global suite of BFSI and Manufacturing clients in their transformation agenda. He brings strong credentials in providing strategic, innovative and transformational solutions to a number of large, complex relationships, and has been instrumental in leading some of the big-ticket deals in the industry over his career. Supported by: Tarun Kumar (Senior Manager - Wipro Insights) Shiddhant Bhattacharya (Analyst - Wipro Insights) ================ ----- Arcticle source ----- https://www.wipro.com/blogs/angan-guha/ -----Author's Posts Contact Wipro Please fill the required details to access the content Angan Guha Angan Guha Chief Executive Officer - Americas & Executive Board Member Angan is the Chief Executive Officer - Americas & Executive Board Member at Wipro. He drives overall business strategy and manages customer relationships across a range of sectors in North America including Financial Services, Manufacturing, Energy and Utilities, and High-Tech. Angan started his career with Wipro 28 years ago and has held various leadership positions across India, the UK, and the US. He has extensive experience in leading large transformational engagements and building high-performing global teams committed to client's success. Angan is also a member of Wipro's Group Executive Council. He can be reached out at angan.guha@wipro.com. =============

### How can capital market players maximize the value of their M&A deals with a focused PMI strategy?

---- Arcticle source ---- https://www.wipro.com/blogs/angan-guha/how-can-capital-market-players-maximize-the-value-of-their-manda-deals-with-a-focused-pmi-strategy/ ---- About The Author Contact Wipro Please fill the required details to access the content How can capital market players maximize the value of their M&A deals with a focused PMI strategy? April | 2021 Global capital markets are undergoing an unprecedented change marked by a consolidation spree. Though the economic impact of covid-19

pandemic caused an M&A lull during 1H20, our recent report found that the year 2020 on a whole recorded \$105 billion of aggregate deal activity, highest in the last five years. Interestingly, the average ticket size of a deal increased by 4x from \$105 million in 2015 to \$420 million in 2020 indicating an increased confidence of capital market leaders to go for larger and strategic deals. In fact, capital markets sector witnessed the largest corporate merger of 2020, where S&P Global agreed to acquire IHS Markit for \$44 billion to gain scale and efficiency from its complementary businesses. Figure 1: M&A in Global Capital Markets\*: Value-Volume Analysis Source: S&P Global Market Intelligence, Wipro Insights We believe that this trend is likely to continue given the limited scope of organic growth. This is in the backdrop of a shift from active to passive investing and immense fee pressure across the capital markets value chain including asset managers, broker dealers and custodians. Moreover, sophisticated needs of tech-savvy customers and complex and ever increasing regulations are increasing the costs, resulting in depletion of margins. Hence, to thrive in this challenging business environment, M&A is one of the most favorable strategic options enabling capital market players to quickly gain economies of scale, diversify offerings and develop next-gen technology capabilities to improve customer's experience. Do you know why majority of M&A deals fail to realize planned synergies? According to a Harvard study1, 70% to 90% of M&A deals across geographies and sectors fail to generate value for the stakeholders within the planned timelines. It is not because the target acquired is not valuable, it is primarily because of sub-optimal PMI. Let's dig a step deeper to identify key mistakes which can diminish your synergies: Planning an M&A integration? Be mindful of below five imperatives To maximize the value of your M&A deal, here are five imperatives I would highly recommend you to include in your PMI plan: Figure 2: Key imperatives for a successful PMI How can you drive results by following a comprehensive approach to PMI? To drive desired synergies, a systematic and comprehensive approach to PMI is a must. It starts with a high level program management, followed by detailed operational and IT integration plans, closing with change management to ensure that your PMI journey is a sustainable one: Lastly, it is rightly said that "well begun means half done". Hence, don't wait until the deal is announced and start integration planning right at the stage of due diligence. This provides you enough room to capture opportunities and manage potential contingencies. Hope this was helpful, wishing good luck for your PMI journey! Footnotes \*Capital markets include - wealth managers, asset managers, investment banks, brokers, financial exchanges and financial information providers "Most Mergers Fail Because People Aren't Boxes" - Forbes, June 2019 Angan Guha Chief Executive Officer - Americas & Executive Board Member Angan is the Chief Executive Officer - Americas & Executive Board Member at Wipro. He drives overall business strategy and manages customer relationships across a range of sectors in North America including Financial Services, Manufacturing, Energy and Utilities, and High-Tech. Angan started his career with Wipro 28 years ago and has held various leadership positions across India, the UK, and the US. He has extensive experience in leading large transformational engagements and building high-performing global teams committed to client's success. Angan is also a member of Wipro's Group Executive Council. He can be reached out at angan.guha@wipro.com. Supported by: Pradeep Agarwal (Senior Manager - Wipro Insights) Agam

#### What Will Drive the Next Phase of Growth in Financial Services?

----- Arcticle source ----- https://www.wipro.com/blogs/angan-guha/what-willdrive-the-next-phase-of-growth-in-financial-services/ ---- About The Author Contact Wipro Please fill the required details to access the content What Will Drive the Next Phase of Growth in Financial Services? May | 2021 Globally, the financial-services industry is undergoing a significant transformation, driven by ongoing changes in the global economic, regulatory, and political spheres - and by one major shift in demographics: Millennials and Gen Z already make up half of the global workforce, and by 2030, they'll represent 75%. Figure 1: Increasing share of Millennials and Generation Z in workforce Source: ILO workforce statistics, Wipro Insights Growing economic clout As more Millennials and Gen Z enter the workforce. their impact on the global economy will only increase. According to World Data Lab, millennials' aggregate annual income is expected to surpass \$4 trillion by 20301. Moreover, in the US, millennials are expected to hold five times as much wealth as they had in 2019, and the group is anticipated to inherit more than \$68 trillion from its Baby Boomer parents by the year 20302. The "Digital Native" generation Millennials and Gen Z have never known a world without digital access to everything. This generation has already started to make a lot of routine financial decisions as well as plan for long-term financial goals and needs. Meanwhile, buying preferences of millennials and Gen Z customers are very much in sync with their digitalfirst attitude. They expect more personalized services based on their demographics, interests, location, and personality, and they want this level of personalization across all interactions. Which means that, for financialservices firms, connecting digitally with Digital Natives is mere table stakes. But to win, financial institutions should build a new model of customer engagement that will deliver tremendous competitive advantage - and drive the next phase of growth in the financial-services sector. Customer engagement reimagined - not just refurbished Tapping this expanding opportunity requires a digital-first mindset. Most financial institutions need to reimagine their overall value proposition from the ground up, not just retool it. Old-school incremental legacy transformations will not help. To match the preferences of consumers and serve them in ways they like, financial-services firms must create seamless digital experiences in every interaction they have with each customer. Most financial services offerings today are commoditized, and switching costs are low. Accordingly, the financial institutions that provide better customer experiences will become preferred providers. This is not optional anymore and will make or break market shares. A well-defined customer engagement strategy is necessary for firms that want to anticipate and meet the increasing demands of consumers while staying ahead of their competition. Figure 2: Deep customer engagement drives customer lifetime value The tools to create superior customer engagement are here The data revolution, coupled with

cutting-edge technologies like AI/ML, has enabled organizations to truly connect with their customers and establish ongoing, value-driven, and emotionally resonant relationships. Recognizing the context behind the customer interaction is critical, enabling firms to respond in an empathetic and relevant manner. It also fosters more trusted and more convenient interactions, empowering financial institutions to drive customer engagement and growth in an increasingly digital world. Many institutions have already begun investing heavily in technologies like artificial intelligence, machine learning, and data analytics while pursuing their digital transformation journey. For instance, banks and insurance companies are expected to increase their AI investments by 85% by 2025, according to the Economist Intelligence Unit. Yet many firms have been unable to reap benefits proportionate to their investments and have been unable to provide customers the personalized experiences they want. So, the question remains: How can financial institutions best utilize the massive amounts of data and the advanced technologies at their disposal to create value for their customers? Strive to create mutually beneficial value propositions There has been exhaustive research on concepts like gamification and behavioral economics and how they can be applied to create mutually beneficial value propositions for customers and for the enterprise. Some financial institutions have successfully delivered on these concepts by building a strong understanding of their customers' behaviors through realtime data and advanced analytics. Equipped with these insights, they gain the ability to deliver highly contextual messages to their customers - at the right place and time, and on the right platform - to nudge them toward favorable outcomes, like improved financial wellness. In exchange for highly personalized, highly valued experiences, customers are willing to share more personal data with their trusted partners. However, they expect to be rewarded for sharing their data, and receive similar levels of personalization, or greater ones, than what is delivered by digital-first players like Amazon and Netflix. The time is ripe for financial industry players to ask: How can we effectively nudge customers to achieve mutually beneficial behaviors? The future of customer engagement in the financial services sector The concept of customer engagement within banking and financial services has already evolved from providing traditional personabased offerings to more contextually personalized products and experiences. with a vision to achieve differentiation. New marketplaces and models (such as "pay as you live", open banking) are seeking to redefine customer experiences and are gaining popularity. Which model will emerge as the new standard for customer engagement across the BFSI? Will there be only one? Find out more in Wipro's new report on hyper-personalization, in which we examine the changing landscape of customer engagement in the financial services space, along with imperatives for incumbents. References Angan Guha Chief Executive Officer - Americas & Executive Board Member Angan is the Chief Executive Officer - Americas & Executive Board Member at Wipro. He drives overall business strategy and manages customer relationships across a range of sectors in North America including Financial Services, Manufacturing, Energy and Utilities, and High-Tech. Angan started his career with Wipro 28 years ago and has held various leadership positions across India, the UK, and the US. He has extensive experience in leading large transformational engagements and building high-performing global teams committed to client's success. Angan is also a member of Wipro's

### Utility Companies : Better, More Compliant Communications When the Lights Go Out

----- Arcticle source ----- https://www.wipro.com/blogs/ravi-govindaiah/utilitycompanies-better-more-compliant-communications-when-the-lights-go-out/ ---- About The Author Contact Wipro Please fill the required details to access the content Utility Companies: Better, More Compliant Communications When the Lights Go Out April | 2021 In every sector, customer communication is important and should be done effectively. In regulated sectors like energy, customer communication of any type -- email, phone, or text (SMS) -- must be done in a compliant way, or the company may face substantial penalties. Surely all utilities want to communicate effectively for the sake of customer experience, but doing it outside the law can be extremely costly: each violation of the 2003 CAN-SPAM Act can result in a penalty of up to \$43,280 (that's \$43,280 per incident!). Historically, utility companies have used various event-based legacy tools and third-party vendors for paper, phone, and electronic communications with their customers. Typically, these communications fall into a few broad categories: mandatory, useful, and marketing. But it's a tough challenge to manage all the different types and channels in a holistic way; a marketing cloud solution can help. Mandatory communications: When the power goes off, customers must be notified and notified promptly. As a recent J.D. Power customer satisfaction study shows, utilities can increase their approval ratings by timely outage communications that include an estimated time of power restoration, followed by a confirmation when the power is restored. In addition to knowing when the power will be back on, customers also appreciate knowing the cause of an outage and ETA. This applies to emergency outage notifications as well. Another mandatory communication is a disconnect alert for nonpayment. Customers must be notified before their service is disconnected (it should be noted that many utilities are not disconnecting customers during the pandemic). Note that all of these are required notifications - even if the customer opts out of communications. The outage notifications could be sent in the form of email, phone, or text; each channel has its own set of preferences and regulations that must be followed to ensure compliance. Non-mandatory communications: Utilities also use non-mandatory communications to enhance the customer experience, but customers must opt-in to messages including: Capturing

Preferences Capturing, maintaining, and managing customers' communications preferences is a daunting challenge, but it's a necessary one to stay compliant. A good approach is a marketing cloud solution that helps utilities communicate with their customers effectively and efficiently at all the times and at the same time help them remain compliant. A marketing cloud solution - like the Salesforce Marketing Cloud - enables utility companies to deliver personalized customer engagement at scale on every channel, including email, web, mobile, social, and digital advertising. It represents a mass communication tool for managing every kind of communication requirement quickly and reliably (see the chart below). Using Salesforce Marketing Cloud enables a utility to: Ravi Govindaiah Client Partner, America Responsible for Utilities at Wipro and has over 15+ years of experience in implementing mission critical enterprise-wide customer relationship management (CRM) solutions from inception to www.wipro.com/blogs/charulatha-b/ ----- Author's Posts Contact Wipro Please fill the required details to access the content Charulatha B Charulatha B Presales and Practice Consultant Charulatha B is a Presales and Practice Consultant with expertise in RFX solutioning and GTM Strategy for Retail & CPG clients under the Consumer Business Unit at Wipro's Digital Operations and Platforms. She is a chemical engineer with an MBA in Marketing & Operations from IIM Kozhikode, India =================

### Self-service channel for consumers as the next frontier in customer experience

----- Arcticle source ----- https://www.wipro.com/blogs/charulatha-b/selfservice-channel-for-consumers-as-the-next-frontier-in-customer-experience/ ---- About The Author Contact Wipro Please fill the required details to access the content Self-service channel for consumers as the next frontier in customer experience April | 2021 The lockdowns during the pandemic compelled people to become self-reliant. Whether it is setting up a new printer that they purchased from an e-commerce site or trying to cook that amazing pasta recipe from a YouTube video, the 'Do It Yourself' or DIY culture is sweeping across the world. While one cannot deny the importance of a human connect, it appears like some of the futuristic sci-fi predictions are coming true. For instance, monotone voiced virtual assistants are now helping us with menial day-to-day tasks. Therefore, it is only natural that a generation which relies on DIYs, Siri and Alexa would prefer to research and resolve their own problems, instead of picking up their phone and speaking to a customer service representative. They may want to speak to a person, only after they have exhausted all the self-service options available to them. Self-service can be as simple as a webpage containing FAQs or as complex as a conversational AI using NLP to mimic human conversations. A welldeveloped customer self-service strategy will anticipate and address customer's needs and concerns across multiple channels seamlessly without compromising on the resolution rate, quality of the service and availability of non-self-serving avenues. Embracing Self-service can yield many benefits to your organization such as: How to set up self-service channels Companies looking to incorporate self-service channels in their customer service have several avenues to explore: Though the one-time investment cost for implementing and integrating self-service solutions into their existing systems might seem steep for some of these, a simple cost - benefit analysis would show that in the long run, investing in self-service channels is going to be largely beneficial for the organizations. Companies reluctant to invest might want to consider opting for a less personalized channel for selfservice. For example, an electronics e-retailer can record and upload tutorial videos explaining how to open and install their products, safety instructions, how to return the products, specific requirements for purchasing their products, etc. on any video hosting platform and post it on their website. With tectonic technological shifts happening throughout the world in retail and consumer markets, companies are now more than ever required to adapt or perish. However, with all the changes, the fundamental truth remains the same - satisfied and happy customers means a direct impact on sales. With an increasing segment of consumers becoming more comfortable with self-service channels, companies need to pay heed to this paradigm shift and adapt to their new customer service strategies accordingly. Charulatha B Presales and Practice Consultant Charulatha B is a Presales and Practice Consultant with expertise in RFX solutioning and GTM Strategy for Retail & CPG clients under the Consumer Business Unit at Wipro's Digital Operations and Platforms. She is a chemical engineer with an MBA in Marketing & Operations from IIM Kozhikode, India www.wipro.com/blogs/divya-prakash/ ----- Author's Posts Contact Wipro Please fill the required details to access the content Divya Prakash Divya Prakash Senior consultant, Data, Analytics & AI Divya has extensive experience and understanding of solutions and offerings in the advanced analytics space. He has a deep business acumen in the data analytics industry and the surrounding digital ecosystem. He provides consultancy, business analysis and thought leadership for building unified value propositions for clients. With a strong understanding of marketing function, Divya is inclined towards building strategies that enhances customer experience at every touchpoints and deliver a delightful experience.

#### How Artificial Intelligence is Re-Shaping the Marketing Function

---- Arcticle source ---- https://www.wipro.com/blogs/divya-prakash/how-artificial-intelligence-is-re-shaping-the-marketing-function/ ---- About The Author Contact Wipro Please fill the required details to access the content How Artificial Intelligence is Re-Shaping the Marketing Function April | 2021 Marketers have long understood their profession has changed significantly from the days of "one-size-fits-all" messaging and manual processes. Yet when the pandemic struck, in addition to taking an enormous human and social toll, it forced marketers to evolve more rapidly than ever.

Research in the US indicated that a majority of respondents had changed their spending habits in the previous year, while an Indian study by ETMoney showed that people had reduced their overall spending by 40%. With spending and engagement patterns upended, being able to deliver a consistent customer experience on-demand and through multiple channels became a top priority. Not surprisingly, there was a tremendous increase in demand for better, more-personalized digital experiences. But technology was suddenly required for more than CX. Almost overnight, Chief Marketing Officers (CMOs) came under increased pressure not only to improve their marketing efficiency, but to demonstrate marketing's holistic business value - a struggle that many are still fighting. One powerful tool to accomplish both objectives is artificial intelligence (AI). Often considered primarily as a tool to power chatbots and product recommendations, AI can both strengthen an organization's marketing capabilities and help it transform into a truly intelligent enterprise poised for future success. Technology's Role in Marketing Across the Customer Lifecycle To thrive in today's digital landscape, organizations must have the ability to innovate marketing to address their customers' needs. Technology will clearly play a key role: Gartner's 2020 CMO spend survey reports CMOs across industries view technology as the path to customer intimacy and plan to spend 26% of their total marketing budget on tech. Marketers increasingly need to address every touchpoint across the customer lifecycle, from display ads to websites to purchasing interface to service to retention. This will inherently require a substantial tech spend. But as CMOs move forward, it's critical that their investments go to the most-impactful technology tools. As retail spending has revived and online spending has surged, are organizations leveraging new and disruptive technologies to enhance their overall marketing cause beyond the customer experience? In many cases, they have not. Yet. Wipro's recent State of Intelligent Enterprises survey suggests that only 28% of marketing organizations felt confident in the maturity of their AI/automation enablers. Furthermore, while 61% of organizations indicated that AI was critical to improve their customer experience, marketing was not in the topfive functions that had adopted AI. That may all soon change. As enterprises recognize the potential of AI to drive innovation in marketing functions and promote business growth, AI will see a surge in usage. AI Drives More than Hyper-Personalization. It Drives Intelligence. Hyper-personalization is the new buzz word, but using AI to creating personalized consumer experiences isn't new. For years, AI has helped marketers deliver personalized recommendations (e.g. Amazon's use of predictive analytics), integrated chatbots, and voice-assisted support systems. AI has even helped improve return on investment through customer segmentation, as demonstrated in Harley Davidson's use of AI to increase sales in New York by 2,930% via targeted/curated marketing content. While impressive examples of AI in action, they're also fairly direct. Where AI can deliver deeper value is through its ability to generate enterprise intelligence. Intelligence is more than knowing customer preferences. It goes beyond presenting simple data. It means capturing and analyzing information to identify new business opportunities, new revenue streams, new ways to optimize existing operations, and - ultimately - new ways to demonstrate the marketing function's contribution to the overall business. To be clear, AI gives organizations tremendous capabilities to collect and analyze data that can dramatically enhance digital-marketing strategies and the customer

experience. AI-driven predictive analytics can target customers with the right content at the right time. And AI can enable responsive and relevant communication via chatbots, which Gartner predicts will be used by 70% of white-collar workers by 2022 (no wonder CIOs identified chatbots as their main AI-based application in 2019). But with the accelerated adoption of digital channels amid the pandemic, organizations - especially those with low product differentiation - stand to gain significantly with AI. The sales and marketing functions of an organization are deeply interlinked, and sales is driven by the marketing team's responsiveness. AI marketing solutions can (and must) be closely integrate with sales tools to maximize benefits and close business faster. Similarly, as organizations make more use of 5G and IoT technologies, they'll encounter even greater volumes and complexity of data. By deploying advanced AI models/solutions, they will be better positioned to respond to changing customer preferences, sentiment analyses, and competitive intelligence. And AI can enable organizations to quickly navigate and analyze rapid market fluctuations, enabling them to optimize their product mix and predict trends so they can capitalize before it's too late. Make no mistake, as companies invest in improving their digital marketing strategies, they must evaluate a design-led framework to refine demand prediction, personalize, and optimize offerings based on changing customer habits and sentiments. With automated solutions, organizations also have the potential to save significant costs. However, it is important that the technology is deployed correctly and smartly. For example, when an airline customer sarcastically tweeted "Thank you for flying me to Delhi and sending my luggage to Hyderabad at the same time," an insufficient AI tool only noticed "thank you" and replied with "Glad to hear it, keep flying with us." Marketers will shudder to think about the downward spiral that started with the airline's brand reputation. Such errors can be avoided by using natural-language processing (NLP) solutions along with AI to create a smarter framework that's not just responsive, but relevant. AI can Enable Intelligence and Demonstrate Business Value The past year has forced marketing organizations to evolve quickly not only to meet changing customer demands, but also the demands of their own company. Where efficiency was once the name of the game, CMOs must now demonstrate their effectiveness and business value to the enterprise writ large. AI has been a valuable tool for digital marketers, but it holds much more power for the marketing function if deployed beyond the customer experience. AI technologies will enable brand growth and help meet customer expectations. Wipro's Marketing Sciences Lab, a repeatable and business-outcomefocused offering, can help organizations experiment with data-driven business insights to deliver short- and long-term business value across marketing, advertising, and sales. Get in touch with us at ask.analytics@wipro.com to learn how a good design and outcome-led framework can help marketing leverage AI to its fullest extent. Divya Prakash Senior consultant, Data, Analytics & AI Divya has extensive experience and understanding of solutions and offerings in the advanced analytics space. He has a deep business acumen in the data analytics industry and the surrounding digital ecosystem. He provides consultancy, business analysis and thought leadership for building unified value propositions for clients. With a strong understanding of marketing function, Divya is inclined towards building strategies that enhances customer experience at every touchpoints and deliver a delightful experience.

=============================----- Arcticle source ----- https:// www.wipro.com/blogs/soumyaroop-mukherjee/ ----- Author's Posts Contact Wipro Please fill the required details to access the content Soumyaroop Mukherjee Soumyaroop Mukherjee Go-to-Market Head, Americas, Apps & Data Services, Wipro Limited Soumyaroop is the Sales and Go-to-Market Leader for Enterprise and SaaS Applications. He and his team are engaged in discussions around digital transformations with CROs and CSOs recommending solutions to customers around QTC/CPQ/CLM. He has 30 years of experience in applications consulting and solutions.

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#### Optimizing the Quote-to-Cash Process Closes More Deals and Increases Revenue

----- Arcticle source ----- https://www.wipro.com/blogs/soumyaroopmukherjee/optimizing-the-quote-to-cash-process-closes-more-deals-andincreases-revenue/ ---- About The Author Contact Wipro Please fill the required details to access the content Optimizing the Quote-to-Cash Process Closes More Deals and Increases Revenue April | 2021 A Sales and Marketing team gives an increasingly competitive edge to an organization, with its effectiveness correlated to optimizations for customer management and sales. The Quote-To-Cash (Q2C) process - which includes generating quotes, finalizing contracts, maintaining orders, collecting and managing revenue, and managing customer churn - is today's most important business process. Optimizing these highly collaborative aspects brings synchronization throughout the organization, can speed up sales cycles, and enable sales teams to close a higher percentage of deals. In fact, a streamlined Q2C process makes closing deals and generating revenue highly effective and integrated. And it can be managed in the cloud and across geographies. Quote-to-Cash Connects the Entire Customer Management Process Quote-to-Cash is the process ultimately responsible for driving revenue and customer satisfaction. Regardless of organization or industry, a Q2C process connects the entire customer-management process and various other client-management functions. In traditional sales and customermanagement systems, the front office manages the customer's intent to buy (using a CRM). These processes include managing proposals, contracts, and orders. The middle office then processes sales and handles the finance, legal, and procurement activities. A company's realization of revenue (in the ERP system) encompasses the entire sales, contract, and customerrelationship lifecycles. Historically, these processes have been disconnected and siloed, leading to manual and tremendously inefficient sales cycles ultimately creating risk, reducing contract closures, and impacting revenues. The steps in a Q2C workflow typically rely on manual and timeconsuming technologies like email and spreadsheets. The vision is to streamline Q2C through automation in one efficient system that provides control and complete visibility of opportunity information, budgets, and margins - providing a 360-degree view of the customer. To accomplish this

goal, optimize the entire process through three pillars: people, process, and technology. These are three essential components for any successful business transformation. When building an all-digital Q2C process, it is imperative to include the all relevant stakeholders involved in the current customer-management process. This will guarantee well-defined processes that achieve the automation required to address a company's entire workflow. And, as systems are built on documented workflows, the end product will streamline the entire Q2C process. With automation in place, teams will have visibility into all customer information, allowing them to create the right quote the first time. Creating the right quote means no errors in product and service configurations - essential for better deal closures. When guotes and configurations match client requests, prospects know they have been heard and understood. For best results, design a process that delivers personalized dynamic pricing and historic pricing suggestions, along with margin visibility for sales reps, so all information is available in the contracting tool for compliance. E-signature support can further simplify contract negotiation and sign-off. Having all of these features in one platform, integrated with CRM, optimizes the Q2C process, improves deal closure performance, and leads to higher revenues. Finding Success with Conga and Wipro The Conga framework can help businesses simplify and automate their Q2C approach. Working with Wipro and Conga Alliance, companies can navigate their middle-office transformation journeys from process assessment to gap analysis to solution implementation. In one example, a US-based healthcare and drug testing company implemented Conga to optimize cost-per-click, contract lifecycle management, X Author for Contract, and Intelligent Workflow Approval. With centralized templates and increased user adoption, better collaboration, and data sharing, the company achieved higher deal closures, faster Q2C cycle time, and improved margin visibility. Wipro is a Global Strategic Partner and the first Managed Services Partner for Conga. With more than four years of experience implementing Conga products and more than 145 Congacertified consultants, Wipro offers a risk- and issue-management approach to ensures risks are identified early and measures are taken to avoid impacts. Beyond Conga connect and support, Wipro's services include CLM for healthcare and life sciences, vertical-centric quick quote, a LIBOR solution offering, managed services, and a Conga QTC flex model. Click here to learn more about our partnership: https://vimeo.com/511449915/b8a6c7ce63 Soumvaroop Mukherjee Go-to-Market Head, Americas, Apps & Data Services, Wipro Limited Soumyaroop is the Sales and Go-to-Market Leader for Enterprise and SaaS Applications. He and his team are engaged in discussions around digital transformations with CROs and CSOs recommending solutions to customers around QTC/CPQ/CLM. He has 30 years of experience in applications consulting and solutions. Kiran Kalyanrao Kulkarni Conga Global Practice Head, India, Apps & Data Services, Wipro Limited Kiran manages the Global practice of Conga at Wipro. He has 18+ years of experience in CRM and Conga products. He helps customers with industry based solutions on the QTC platform and solves process and operational issues to improve the effectiveness of sales teams. Dinesh Sharma Conga Global Alliance Manager, Wipro Limited Dinesh has 20+ years of experience in Alliance Management, Pre-sales, and Cloud and Infrastructure. He has helped global customers achieve their digital transformation journeys across all verticals.

### The Future of Well-Being: How Tech Will Impact Employee Healthcare Benefits

----- Arcticle source ----- https://www.wipro.com/blogs/mohd-hague/the-futureof-well-being-how-tech-will-impact-employee-healthcare-benefits/ ----- About The Author Contact Wipro Please fill the required details to access the content The Future of Well-Being: How Tech Will Impact Employee Healthcare Benefits April | 2021 The employee healthcare benefits reckoning is here. The enduring impact of COVID-19 has converged with digital transformation - especially the accelerated advancement of data collection and analytics - to create sweeping changes in employee-employer relations. The chaotic pace of change in managing remote workforces and retaining top talent has placed an enormous strain on employers. Meeting bottom lines while addressing significant increases in employee healthcare costs and premiums can become an existential struggle. Today, employers are adopting an integrated and innovative data-driven approach to balancing the fiscal health of their businesses with high-quality benefits that valuable employees demand (in addition to traditional salaries) for their talents, loyalty, and services. Employers are exploring avenues to leverage digital technologies and virtual health platforms that cater to various aspects of employee well-being - while also pursuing partnerships with hospitals and physicians to help manage increases in healthcare costs and premiums for their workers. Technology will help bridge human needs and healthcare resources by offering flexible plans, suggesting effective uses of earned benefits, and helping to create benefits packages that are tailor-made for each employee. A Global Epidemic of Unwellness The rapid proliferation of remote workers and teams in response to the global pandemic profoundly reduced the level of interaction between employees and employers. This new dynamic took a significant toll on the social and psychological wellbeing of employees and compelled employers to seek resources that could identify and address the consequences of being confined to isolated environments where interacting is primarily done via laptops and digital devices. Stress, for example, has become the leading risk factor in employee

mental health, with spikes in both depression and anxiety rising sharply, largely due to feelings of isolation created in the wake of COVID-19. Though limited amounts of stress are typical in the workplace, excessive stress produces significant hazards that impact well-being and productivity. Mental health challenges can emerge at any time, so employers must be vigilant. To address this global epidemic of unwellness, employers are conducting recurring virtual check-ins with employees to detect signs of mental health challenges such as difficulty concentrating, increased fears and worries, worsening mood, social withdrawal, or decreased work performance. Corporate human resources units are beginning to use virtual reality technology previously employed by psychotherapists alongside apps that provide self-help information and offer guidance. Genentech, for example, now offers free subscriptions to meditation apps, and Bell provided employees 24-hour access to online mental health tools. Additionally, businesses are offering mental, financial, and social health initiatives to supplement the traditional physical health benefits, and helping employees use the various aspects of virtual health like telemedicine and e-pharmacy to access real-time, personalized medication and care. The Merging of Employer/Healthcare Partnerships More than two-thirds of Americans get their health insurance from private insurers. More than half of all insurance coverage is employer-provided. With the impact of recent events such as the pandemic, the cost of healthcare will continue to rise and, consequently, so will the premiums for employer-sponsored health plans. Employers need to plan for this eventuality. Since our post-pandemic future remains uncertain in terms of how healthcare will be delivered in cost-effective ways, employers should take decisive actions and invest in developing more comprehensive strategies. Employers, for example, can better weather the ups and downs of this unsettled future by: Employers are increasingly prioritizing employee health and well-being rather than healthcare plans and exploring more personalized plans that offer reduced premiums and more choices. In fact, some companies have created new contributory and voluntary benefits, including programs where people with similar conditions form a group that providers treat as a group rather than individual patients. Furthermore, empowering employees to customize their benefits from a wide range of emerging benefits - such as pet insurance and even insurance to cover out-of-pocket healthcare costs not covered by medical insurance allows employers to address their employee's holistic health and well-being needs. This proactive and more targeted approach to individual health priorities creates better outcomes and lowers the risks for the health insurance companies, thereby reducing premiums for medical plans. Data-Driven, Personalized Healthcare Solutions Healthcare payers and providers hold a gamut of valuable patient information. The confluence of "Big Data," which enables digital methods to collect, store, and track patient records, with smart devices like smartphones, wearable devices, IoT applications, etc., allows people to monitor their health and interact with their doctors in real-time. This enables the immediate analysis of illnesses and reduces human-caused inaccuracies and delayed diagnosis. Healthcare data analytics and machine learning play a major role in devising personalized medicine strategies that offer the best treatment options for the patients. Ever-increasing claims and EHR (Electronic Health Record) data, coupled with the power of genomic medicine and data analytics, profoundly improves genetic transparency and personalized care options for specific medical

services. With more data to guide payers, providers, and patients towards the most effective, lowest-cost care plans, customized care contracts around genetic testing and personalized therapies will likely become a more common technique for controlling costs and fostering better patient outcomes. The future of healthcare will be significantly driven by digital transformation enabled by interoperable health data on secure, open platforms. Consequently, healthcare will concentrate more on well-being rather than reacting to an illness. With more focus on retaining talent and accommodating diverse workforces and individual needs, healthcare will increasingly use personal data to implement moves towards patient empowerment and patient-centric care. Value-based care - paying for outcomes as opposed to a fee for service or a procedure - has also been gaining traction recently and will become a standard expectation from employees regarding benefits. The employee healthcare reckoning was long overdue, and though the pandemic may have spurred much-needed change, data and technology will continue to define the future of employee benefits. Mohd Haque SVP & Head of Healthcare & Medical Devices- Americas, Wipro Limited Mohd. Haque has more than two decades of experience in finding and delivering value to the business across core functions including P&L, Sales, Strategy, Consulting, Account Management and new Product/IP introduction. In his current role, Mohd Haque is responsible for the overall strategy and execution for Healthcare and Medical Devices business at Wipro. He is passionate about technology, innovation & customer experience and carries a firm belief of evangelizing the three to create real value for the clients. He believes in living an inspired life with continuous learning at every stage. Rajesh Ramasamy Consulting Partner, iDEAS-Domain & Consulting, Wipro Limited Rajesh has over 24 years of experience in Business and technology consulting in the Healthcare, Pharma and Retail space. At Wipro, he leads the sales and delivery of consulting-led integrated & pure play consulting engagements, with a focus on domain-based Arcticle source ---- https://www.wipro.com/blogs/jay-jayadev/ ---- Author's Posts Contact Wipro Please fill the required details to access the content Jay Jayadev Jay Jayadev Client Partner, Financial Services, Wipro, Limited Jay is a Client Partner for Wipro's Salesforce Practice with extensive experience in the financial industry. As a senior leader, he has demonstrated success in providing expert advice to a number of organizations on sales and delivery of large digital transformations. Jay helps companies align Salesforce solutions, process, and people with overall business objectives in the CRM 

#### 7 Ways Financial Institutions Can Build Trust Using Digital Channels

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Ways Financial Institutions Can Build Trust Using Digital Channels April | 2021 Modern banking customers vary, from tech-savvy consumers who exclusively use mobile apps to those who prefer traditional banking models. But no matter the means of access, financial services affect everyone. That's why it's critical for financial institutions to understand what customers want and take steps to ensure that each customer feels safe and comfortable using any banking product or service. In today's environment, financial customers want to be heard, they want to feel connected, and they want to trust that their financial institution will get them from where they are today to where they want to be. To really know their customers, financial institutions should leverage digital channels and tools to evolve from single transactions to trusted relationships. By enabling 360-degree visibility into a customer's financial profile and influencers, advisors can know their customers like never before, driving trust and loyalty. There are seven ways financial institutions can achieve this using digital channels: These features are not just critical for banking, they can be implemented in the insurance industry, mortgage and lending, and wealth management. These strategies, using digital channels, are possible using Financial Services Cloud (FSC). It is a Salesforce based platform reimagined for the financial services industry. FSC will transform how advisors work with customers. FSC is built on a framework of industry best practices and experience, market research, and customer validations. It enables an enterprise to put the customer at the center of business operations, developing a 360-degree view of each customer that enables delivery of personalized advisory services. To provide organizations with an effective way to adopt FSC, Wipro has created the framework for a seamless migration path from current Sales/Service cloud to FSC with the FSC Tool Kit. Wipro partners with many financial services companies that are making a lasting mark in today's fast-paced financial world. Mateen Malik General Manager, Wipro Salesforce Practice Mateen is the General Manager across a range of sectors in North America including Financial Services, Insurance, Capital Markets, Manufacturing, Energy and Utilities. Mateen helps companies align Salesforce solutions, processes, and people with overall 

#### Re-Imagining Dispute Management with an Integrated Digital Strategy

---- Arcticle source ---- https://www.wipro.com/blogs/jay-jayadev/re-imagining-dispute-management-with-an-integrated-digital-strategy/ ---- About The Author Contact Wipro Related Blogs A New Generation Emerges in India's Evolving Payment System For a successful BFSI cloud transformation, build your complex landing zone right Modernizing the Core Banking System: Enabling the Future Please fill the required details to access the content Re-Imagining Dispute Management with an Integrated Digital Strategy September | 2021 Online purchases are on the rise, and with them, so are fraud and disputed payments. Historically, disputed

payments were viewed as simply a cost of doing business, and management of these payments received little investment in terms of technology and resources. But with the rising use of digital payments, more than 80 percent of dispute chargebacks are now fraud-related. As fraudulent charges continue to grow (chargeback disputes will grow from \$23 billion in 2018 to \$35 billion by the end of 2021), financial-services companies can no longer deny the increasing importance of dispute management. Fortunately, advances in technology make it possible to manage disputed charges as part of an integrated digital strategy. And the technology has improved to the point where AI and automation can perform a good deal of the heavy lifting. These technologies make it possible to manage the disputed charges quickly and improve the customer experience in these dispute journeys. Why Build Dispute-Management Capabilities? Three main drivers are compelling companies to address dispute management as part of their overall digital strategy. These drivers include changes in the economics of digital payments, the rising importance of the customer experience, and improvements in digital integrations. Economics of Digital Payments The economics of digital payments have changed. Global digital payments in 2020 totaled \$5.44 trillion and are expected to reach \$11.20 trillion by 2026. As the volume of digital payments continues to rise, the volume of customer disputes will rise too. The cost of managing these disputes is rising as well, both in terms of human capital and legacy technology costs. If left unaddressed, those losses will add up. Customer Experience is Now a Central Focus The customer experience has become a central focus of many digital transformations. The first generation to grow up online are now adults, and they expect every company to offer the type of customized experiences they know from Amazon, Netflix, and others. Today's customers will simply not tolerate a bad customer experience. They are not afraid to tell others about a poor experience, and they're guick to share their stories online - particularly bad interactions like disputed payments. Financial services companies must manage the dispute process and the after-effects in a way that these customers want and expect. Improvement in Digital Integration Significant advances in technology make an integrated dispute management strategy possible. These technologies include artificial intelligence, machine learning, and data aggregation. Financial services companies are beginning to accept that various payment services cannot be offered and operated in isolation. Disputes are part of a much broader, integrated ecosystem that historically has operated in silos (fraud claims versus non-fraud claims, credit versus debit, fraud operations versus dispute operations, etc.). This means an integrated strategy can be built to both manage the disputed charges and provide a great customer experience throughout the process. Solving Dispute Management and Customer Experience - Together With an integrated solution that manages disputes while providing a positive customer experience, companies can be customercentric and build loyalty and trust while improving the dispute-resolution process. Financial services firms can achieve this balance by taking four steps. Identify and engage with all customers via all channels (social, bots, live chat, email, and SMS). Listen on social platforms, leverage natural language processing to identify customer sentiment, capture customer dissatisfaction, and respond immediately. Capture all complaints regardless of channel for audit purposes, and orchestrate customer engagement across all channels in real-time. Send customers on personalized digital dispute

resolution journeys. Leverage AI to know and service the customer. AI can determine which complaints are likely to escalate. The AI engine can recommend the next best action, and workflow automation can allocate disputes to the right disputes agent. A complete customer view is necessary for better insights and to guide agents through the dispute processes. Guided workflows can make sure the correct data is captured and next best actions are taken, while the AI engine can recommend relevant articles to help agents elevate the service experience, track all service level agreement (SLA) metrics and automatically escalate resolutions within required timeframes. The goal for dispute management is to resolve fast and build trust. Automation helps by driving better productivity and reducing issueresolution times. By integrating with core systems, including existing dispute-management platforms, collaboration is possible across service teams. Capturing all dispute engagement data gives companies more information to prepare for audits. And live status updates show customers a commitment to transparency that builds trust. Automation captures all customer feedback throughout a dispute resolution, leading to higher rates of positive outcomes. Use out-of-the-box analytics and AI models to uncover dispute insights. Use these insights to explore, learn, and take action. Recognize consistent themes, determine impacted customers, and engage immediately. Build proactive AI models without writing code, and quickly deploy the models to customer service agents while improving service teams' overall productivity by identifying areas for re-skilling. A Comprehensive Solution With the growth of digital payments, "card not present (CNP)" fraud is on the rise. Financial services companies can no longer consider these charges a cost of doing business. Wipro has helped financial services companies leverage Salesforce's Financial Services Cloud (FSC) and our Dispute Management assets to manage their disputemanagement process while providing enticing user experiences. As even more financial services companies advance their digital transformation, adding charge dispute management to their digital strategy is imperative. Industry: Jay Jayadev Client Partner, Financial Services, Wipro, Limited Jay is a Client Partner for Wipro's Salesforce Practice with extensive experience in the financial industry. As a senior leader, he has demonstrated success in providing expert advice to a number of organizations on sales and delivery of large digital transformations. Jay helps companies align Salesforce solutions, process, and people with overall business objectives in the CRM space. Todd Murphy CRM Strategy Lead, Americas 2 Todd is an experienced executive in strategic consulting, delivery leadership, and digital transformation, with 12+ years' experience in Salesforce solutioning and delivery. He provides digital strategy and delivery leadership to the Wipro Americas 2 industry verticals- which includes banking, insurance, capital markets, automotive, manufacturing, oil and gas, utilities, and technology services. He is 5x Salesforce certified. India's payment journey has changed significantly over time. What started as a barter system has evolved into cashless payments Migrating your data and services to a public cloud service like Google Cloud offers multiple advantages, including increased flexibility and agility.... Traditional banks are reinventing themselves to meet rapidly evolving customer expectations, www.wipro.com/blogs/akshita-reddy/ ----- Author's Posts Contact Wipro Please fill the required details to access the content Akshita Reddy Akshita

# Agility and cost efficiency: Key reasons to transcend to cloud based customer experience platforms

----- Arcticle source ----- https://www.wipro.com/blogs/akshita-reddy/agilityand-cost-efficiency-key-reasons-to-transcend-to-cloud-based-customerexperience-platforms/ ---- About The Author Contact Wipro Please fill the required details to access the content Agility and cost efficiency: Key reasons to transcend to cloud based customer experience platforms April | 2021 Brands that focus on customer experience as a critical function of business process can accrue impactful results. As organizations in the consumer goods and retail sectors expand their global operations, they cater to a diverse set of audience with polarity in customer expectations. A global brand has to adapt to the market in which they are set up, and yet stay focused on their values and mission. Research indicates that despite of a challenging year, in 2020 global retail ecommerce sales grew by 27.6% for the year, for a total of \$4.28 trillion. Interestingly, global retail sales declined by 3% to \$23.84 trillion. A survey of over 30,000 consumers indicated that more than half preferred to shop online post COVID-19. These trends clearly indicate a dramatic shift towards ecommerce and direct to consumer. Traditional brick and mortar stores and consumer packaged goods companies are now finding it imperative to have an online presence or risk the loss of precious customers to competition. As a result, there is a pertinent need for blending hyper personalization and unique customer experience of a store visit, to an ecommerce shopping experience. One of the key paths to delivering a consistent customer experience, irrespective of location is to be agile and adapt to rapidly changing environment. One of the ways of bringing in agility, speed, flexibility, and scalability is by adopting 'cloud-based customer experience solutions'. This solution gives businesses the required flexibility and reliance to scale up during consumer demand and are also adapted for an omni-channel environment. Today, most businesses use 8 to 10 different channels for customer engagement. Maintaining efficient digital interactions across all channels requires a robust set of customer experience technologies, which help businesses with engagement metrics to understand the behavioral patterns. Through customer journey mapping, customer experience leaders can deliver consistent and personalized customer interactions across all these channels. Digital CX platforms fulfill the need to build a reliable bridge between customers and the brand With much less reliance on IT support and maintenance, a cloud-based platform also gives a chance to focus resources

on more strategic business objectives. Generational shift in IT is an economic shift as well, as the way to gain customer base is to invest in innovation and technology. Some of the other economic benefits include: In the current emerging markets, it is crucial for businesses to address the changes required to their IT landscape to not only acquire a bigger market share but also to retain the existing one. At the end of the day, customer satisfaction is the path to customer advocacy and loyalty. Akshita Reddy Presales Consultant, CBU, Digital Operations and Platforms Akshita is a part of the retail and consumer presales team, and is involved in building business process solutions for client proposals and creating go-to-market pitches for logo expansion. Akshita has an MBA with specialization in sales and marketing from NMIMS Mumbai. ========= Arcticle source ---- https://www.wipro.com/blogs/s-mahadevan/ ---- Author's Posts Contact Wipro Please fill the required details to access the content S Mahadevan S. Mahadevan Practice Director Mahadevan is an experienced SAP Solutions architect with vast experience delivering SAP on Cloud and S/ 4 HANA transformations. He helps customers with their transformational journey during Solutions and Delivery phases. He can be reached out at 

## A Journey Towards SAP S/4 HANA and Cloud: How to Address Unique Requirements

----- Arcticle source ----- https://www.wipro.com/blogs/s-mahadevan/a-journeytowards-sap-s-4-hana-and-cloud-how-to-address-unique-requirements/ -----About The Author Contact Wipro Please fill the required details to access the content A Journey Towards SAP S/4 HANA and Cloud: How to Address Unique Requirements April | 2021 SAP made a definitive move in the direction of innovation with the launch of SAP S/4HANA in 2015. The SAP S/ 4HANA architecture is unique, empowering enterprises to meet evolving business demands in an increasingly unpredictable world. It enables seamless integration of data from multiple sources, and its advanced inmemory computing enables organizations to analyze and make decisions in real time. Clearly, moving to SAP S/4HANA provides organizations a competitive edge. But many enterprises have complex structures with multivendor applications and other unique issues that make SAP S/4HANA seem like an unattainable goal. While the SAP S/4HANA conversion and cloud migration is a large undertaking, following a systematic approach can ensure that the nuances of each enterprise are considered to help determine a successful transformation journey. The Path to SAP S/4 HANA Migration Every organization's approach to SAP S/4HANA implementation is different, determined by the size of the SAP S/4HANA landscape and organizationspecific factors. While not all enterprises have the appetite for large-scale transformations, there are essentially two approaches to the implementation: An Example of Nuanced Requirements enterprise wanted to finalize its journey onto the SAP S/4HANA platform. Like all companies, it had several challenges to overcome. In this specific

case, it needed to migrate its ECC 6 landscapes to the cloud to reduce the cost of SAP systems on-premise. In addition, the company wanted to reduce its datacenter footprint. An end-to-end analysis considered several aspects: the cost of hosting SAP S/4 HANA on cloud, including any hidden costs, and how to cater to growth of the migrated system. In addition, the analysis focused on closely integrated non-SAP applications, and the transformation requirements related to these. For example, an analysis of how Oracle-native database connections would be handled post-migration. Other important considerations included the HANA licensing impact on usage of specific features, analysis of the data transfer volumes between SAP and non-SAP (with associated costs), recommendations of migrating some non-SAP systems to cloud, and data transfer costs between on-premise and cloud. The Unique Journey to SAP S/4HANA The first decision to make in this example was taking a greenfield versus brownfield approach. Wipro recommended migrating to SAP S/4HANA along with cloud migration using the brownfield approach, due largely to the company's high number of customized processes in the SAP system, which increased the level of risk. The next decision was which path to take for the technical migration to SAP S/4. At least two options were considered: After analyzing the company's landscape, customizations, business process impact, and infrastructure footprint, Wipro recommended the one-step approach. Although the twostep approach seemed preferable given the large database size, the analysis identified multiple issues that would impact the technical migration. First, migrating to public cloud as-is requires a stabilization period of one to two years before proceeding with SAP S/4HANA transformation, leading to much higher costs. In addition, testing the large system would drive-up costs; the existing ECC system was 18TB. The required testing efforts would be nearly double that of the combined approach. Another factor against a two-step approach was that the production SAP system would need at least two major downtimes: one for the go-live during as-is migration, and another during the S/4 conversion cutover. Depth of Understanding is Essential for a Successful SAP S/4HANA Migration SAP S/4HANA conversion and cloud migrations are large transformational initiatives for any organization. And every organization has unique considerations that must be addressed when mapping a path. For a successful transformation, organizations need to have clearly laid out their business and technical objectives, transformation path, and target platform. Wipro considers every SAP S/4HANA journey to be unique and does not restrict companies to the standard readiness check analysis, BSR analysis or "quick sizer" results alone. By leveraging a unique "Safe Passage to SAP S/4HANA" conversion framework, along with Wipro's extensive SAP experience and product knowledge, companies can establish a reliable conversion to SAP S/4HANA regardless of migration approach or their unique business nuances. S. Mahadevan Practice Director Mahadevan is an experienced SAP Solutions architect with vast experience delivering SAP on Cloud and S/4 HANA transformations. He helps customers with their transformational journey during Solutions and Delivery phases. He can be reached out at mahadevan.04@wipro.com

==========================----- Arcticle source ----- https:// www.wipro.com/blogs/lakshmanan-a-v/ ----- Author's Posts Contact Wipro Please fill the required details to access the content Lakshmanan A V Lakshmanan A V (Laks) General Manager and Global Head for Wipro's Datacenter & Hybrid Cloud Services. He has over 22 years of Infrastructure transformation experience specialized in organization and technology design, solution assurance, business development, and program delivery across all global regions. With a transformation program delivery background as core, he moves across various portfolios, the most recent being the global lead for transformation services for the cloud and infrastructure business for Wipro. He has incubated new practices, such as E2E Service management and Cloud automation, during this tenure at Wipro. Working across regions and with organizations with a pan-geo presence has given him good exposure to working cultures and an ability to navigate the best value for the efforts. He also specializes in Commercial models and business case analysis, essential for driving ROI/TCO for large transformation programs, securing budgets for clients, and adopting modern technology practices and new ways of working in large client engagements.

#### Time to discover Zero again

----- Arcticle source ----- https://www.wipro.com/blogs/lakshmanan-a-v/timeto-discover-zero-again/ ---- About The Author Contact Wipro Please fill the required details to access the content Time to discover Zero again April | 2021 Lakshmanan A V (Laks) General Manager and Global Head for Wipro's Datacenter & Hybrid Cloud Services. He has over 22 years of Infrastructure transformation experience specialized in organization and technology design, solution assurance, business development, and program delivery across all global regions. With a transformation program delivery background as core, he moves across various portfolios, the most recent being the global lead for transformation services for the cloud and infrastructure business for Wipro. He has incubated new practices, such as E2E Service management and Cloud automation, during this tenure at Wipro. Working across regions and with organizations with a pan-geo presence has given him good exposure to working cultures and an ability to navigate the best value for the efforts. He also specializes in Commercial models and business case analysis, essential for driving ROI/TCO for large transformation programs, securing budgets for clients, and adopting modern technology practices and new ways of working in large client engagements. www.wipro.com/blogs/mateen-malik/ ----- Author's Posts Contact Wipro Please fill the required details to access the content Mateen Malik Mateen Malik General Manager, Wipro Salesforce Practice Mateen is the General Manager across a range of sectors in North America including Financial Services, Insurance, Capital Markets, Manufacturing, Energy and Utilities. Mateen helps companies align Salesforce solutions, processes, and people with overall business objectives in the CRM space.

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## Corporate Sustainability Performance: Measure, Report, and Make a Difference

----- Arcticle source ----- https://www.wipro.com/blogs/mateen-malik/ corporate-sustainability-performance-measure-report-and-make-a-difference/ ---- About The Author Contact Wipro Please fill the required details to access the content Corporate Sustainability Performance: Measure, Report, and Make a Difference April | 2021 The United Nations first raised the issue of climate change in 1972. Since then, the sustainability movement has gained momentum, and the governments of most advanced nations now embrace sustainability as an active issue. For businesses, a variety of competing forces (regulations, market demands, etc.) have begun dictating their need to adopt a sustainability strategy. But many companies are left wondering how to handle the complexities involved in measuring and reporting their sustainability efforts. For enterprises to have a positive impact on climate change, they need environmental impact data to better understand their carbon footprint and how to take action. This often requires insights they currently don't have, whether because data is siloed, in spreadsheets, or just not being collected. As such, carbon-footprint measuring and reporting may seem daunting - and understanding an enterprise's carbon impact (and advances) may seem like a pipe dream. It doesn't need to. Businesses simply need a complete view of all data that drives impact, meets stakeholders' demands, and can help them meet their sustainability goals. Salesforce Sustainability Cloud puts all of this climate data in a single source to help companies monitor their performance and achieve measurable results. Sustainability Cloud - A New Solution for a New Challenge Sustainability Cloud is backed by a company (Salesforce) that's already trusted by more than 150,000 organizations worldwide. As such, it's a tool that tens of thousands of enterprises have at their immediate disposal. Sustainability Cloud streamlines the capture and auditing of carbon (greenhouse gas) footprint data. It solves many of the issues with traditional carbon accounting like incomplete or missing records, manual data tracking in multiple spreadsheets, and unstructured data. By having all data in a single source, the efforts involved in data collection, calculation, and auditing activities are streamlined and reduced. This tool can help companies effectively manage their carbon footprint, address the business challenges of sustainability, and provide insights and visibility into all of their sustainability efforts. In the process, customers, employees, and investors will feel confident that they are working with a company committed to documenting its progress and achieving meaningful improvements. The Business Challenges of Sustainability Compliance Adopting a corporate sustainability strategy introduces new business challenges; regulatory requirements, new carbon-audit accounting processes, and investors' increasing demand for sustainability gains are just a few that companies must address. Sustainability Cloud has assembled required data references including changing regulations and unit conversions, and has united

multiple data feeds to simplify how companies address these issues. The carbon-inventory calculations are automated based on the GHG Protocol Corporate Accounting and Reporting Standard. The result: Sustainability Cloud does the heavy lifting, and companies need not check calculation accuracy in spreadsheet-driven inventories. To simplify compliance, the app is preloaded with reference data from: US Environmental Protection Agency (EPA) US Energy Information Administration (EIA) UK Department for Business, Energy & Industrial Strategy (BEIS) Greenhouse Gas (GHG) Protocol Sustainability Cloud generally aligns with widely used and accepted standards of greenhouse gas reporting, such as the Greenhouse Gas Protocol from the World Resources Institute. This means it is a reliable tool to disclose carbon footprint data to various reporting bodies. And, because it's built on the Salesforce platform, it includes tools that facilitate collaboration, project management, and reporting. Sustainability Insights Drive Performance and Change As with most corporate endeavors, insights are needed to measure and prove success. Sustainability Cloud includes interactive dashboards that help aggregate data and provide insights about where businesses can focus to address their environmental issues. By presenting data in one place, companies can quickly measure their environmental impact, gain actionable insights to achieve further improvements, report key findings to stakeholders, and determine relevant climate-action strategies. These insights can then be scaled across organizations and the ecosystem, ensuring that sustainability goals are achieved throughout the supply chain. Take Steps to Transform to Net Zero There are a variety of initiatives underway to help companies across the globe navigate the issue of sustainability. One such initiative, Transform to Net Zero, is a coalition of 10 founding companies - including Wipro - with a passion to drive change. Transform to Net Zero has an ambitious plan to deliver an open-sourced library of sustainability resources to help any company navigate this important topic. This library, along with accessible tools like Salesforce Sustainability Cloud, can help any company build sustainability across its enterprise, report its progress for external stakeholders, and chart its own path toward contributing to the global Net Zero movement. Mateen Malik General Manager, Wipro Salesforce Practice Mateen is the General Manager across a range of sectors in North America including Financial Services, Insurance, Capital Markets, Manufacturing, Energy and Utilities. Mateen helps companies align Salesforce solutions. processes, and people with overall business objectives in the CRM space. www.wipro.com/blogs/rohit-sardeshpande/ ---- Blogs by Author Contact Wipro Please fill the required details to access the content Rohit Sardeshpande Rohit Sardeshpande Practice Head (GCP AI), AI Solutions | iDEAS - Apps & Data, Wipro Technologies Rohit focuses on applying AI methods and techniques in solving industry and business problems. He works in diverse domains, from banking to healthcare to cyber security, identifying opportunities and developing products and solutions to help Wipro build IP in various sectors. He is an expert in traditional machine learning and deep learning, with a focus on natural language processing. Rohit has bachelor's degree from Visvesvaraya Technological Institute and a post-graduate Diploma in Artificial Intelligence and Machine Learning from IIIT, Bangalore. He's a Toastmaster and an amateur photographer.

### Bias in data: The bad and good of it

----- Arcticle source ----- https://www.wipro.com/blogs/rohit-sardeshpande/ bias-in-data-the-bad-and-good-of-it/ ---- About The Author Contact Wipro Please fill the required details to access the content Bias in data: The bad and good of it April | 2021 Artificial Intelligence (AI) is clearly being adopted by enterprises, with just 15% of organizations saying they are not doing anything with AI. Though the benefits are obvious, the challenges to adoption, especially related to bias and algorithmic fairness, can pose significant hurdles. The issues and problems with solutions that incorporate AI may not be obvious at first sight, but it's important to recognize them. Biased AI models, for instance, can affect business outcomes in ways that are difficult to estimate and mitigate. In order to devise mitigation measures, enterprises need to identify scenarios where bias is harmful, and when it is good. It is very important to understand this distinction to tackle bias appropriately. Bias in commercial machine-learning models Humans all have biases, but companies must take care to account for accidental biases in AI models. Commercially available models such as the massive GPT-3 language model have been shown to be biased by associating occupations with gender, saying sentiment is affected by race, and associating certain words with religion. Such historical biases, which exist in the real world, seep into data-generation processes and can impact business decisions if those decisions are made based on predictions by AI models using biased datasets. A good example of the kind of impact historical bias can have is in the 2018 Correctional Offender Management Profiling for Alternative Sanctions (COMPAS). This study showed that the commercial software widely used to predict recidivism (risk of a person to recommit another crime) is no fairer than a cross-section of online survey respondents with little or no criminal justice expertise. The study found that the software assigned a higher risk score to African-Americans than Caucasians, even if the subjects had the same profile. Identifying the sources of bias requires an in-depth understanding of where the original data was sourced (e.g. Wikipedia, open data stores, etc.) and what pre-processing was done to clean it up. Tackling these sources of bias can be laborious. For instance, when using commercially available pre-built models, careful consideration needs to be given to various markers specifying traits such as gender, religion, political associations, and race. These markers should be removed before using the data for any analysis. Using commercial models does not provide enterprises significant control over data, pre-processing, and modelling techniques. Where feasible, enterprises should look at developing models using their own data to gain full control over the modelling process to mitigate harmful bias. Guidelines for data preparation for model training The typical activities in data preparation for machine learning models are well understood and follow these broad steps: collection and selection, preprocessing and clean-up, and transformation and feature engineering. Of these, data collection and selection is crucial from the perspective of reducing harmful bias. Data collection should pay close attention to data

collection sources to ensure good coverage for the given use cases. It should avoid duplication and ambiguities between sources. Data selection from an aggregated pool of data should focus on generating a representative dataset to reflect ground truths that comply with the business process, and it should avoid selection bias. When bias is good Bias, at times, can be good. For example, with respect to anti-money laundering, financial institutions are mandated to comply with defined regulations. These regulations can vary by geographical region. Financial institutions can utilize maps generated under the High Intensity Drug Trafficking Areas (HIDTA) program to understand risk profiles of customers residing in designated high-risk areas. HIDTA provides assistance to federal, state, local, and tribal law-enforcement agencies operating in areas determined to be critical drug-trafficking regions of the United States. For financial institutions operating in these areas, risk profiling is a mandated activity. Enterprise data-generation processes and corresponding business decisions that are impacted by these compliance measures may show historical bias over long periods of time. For instance, financial institutions may choose not to extend credit to a business operating in geographical areas termed risky due to HIDTA. These decisions and the underlying data become part of an AI model to automate the credit decision process and can influence predictive behavior. When this data is reviewed in an aggregated or larger scale (at city or state levels), these predictions may appear biased. However, such bias is essential for the normal functioning of the enterprise to reduce the financial institutions' risk and to comply with defined regulations. Identifying sources of bias requires deep domain expertise and in-depth understanding of the enterprise's business processes. Various aspects of the business processes and regulatory considerations need to be a part of the analyses. Dealing with bias and ensuring explainable discrimination reflects business ground truths and should be an essential part of the modelling process. Enterprises should ensure that: With increasing use of AI in day-to-day business activities, it is important to consider data bias on algorithmic fairness and devise strategies to deal with its effects. In some situations, bias can lead to fair models and acceptable business outcomes, while in others, bias should be avoided and dealt with early in the lifecycle. References Rohit Sardeshpande Practice Head (GCP AI), AI Solutions | iDEAS - Apps & Data, Wipro Technologies Rohit focuses on using AI to solve industry and business problems, leveraging Google Cloud AI. He works in diverse domains, from banking to healthcare to cyber security, identifying opportunities and developing products and solutions to help Wipro's customers succeed. He is well-versed in traditional machine learning and deep learning, with a focus on natural language processing. Rohit has bachelor's degree from Visvesvaraya Technological Institute and a post-graduate Diploma in Artificial Intelligence and Machine Learning from IIIT, Bangalore. He's a Toastmaster and an source ----- https://www.wipro.com/blogs/damodar-sahu/ ----- Contact Wipro Blogs By Author Powering Manufacturing Subscription Digital Procurement in Manufacturing: Restore Growth and Ensure Resilience Please fill the required details to access the content Damodar Sahu Damodar Sahu Head of Global Strategic Alliances, New Age and SaaS Applications, Wipro Limited. Damodar is responsible for building Wipro's global New Age & SaaS Products Alliance and Partnership Program. With over 23 years of experience, he has a long history of accomplishment in the industry. He has

a Bachelor of Technology degree in electronics and telecommunication engineering, and a master's in operations management from Amity University. Damodar's philanthropic work focuses on supporting education for underprivileged students in his village in Odisha, India. The subscription model is fast becoming popular. While it was prevalent in the use of software, it's now gaining ground in everyday consumer usage as well. Research by Zuora and YouGov indicates that 90% of the people in the UK now have at least one subscription service. A survey by Coupon Follow with over 1,000 people indicated that consumers had two active subscription boxes on an average and spent about \$58 a month on these subscriptions. Forty percent of companies surveyed in GEP's The Business Costs of Supply Chain Disruption report claim they experienced measurable damage to their brand image because of pandemic-related supply chain disruptions. Another 36% of organizations survey claim cyberattacks on supply chains are a growing concern. In total, the report estimates revenue losses due to supply chain disruptions to be as high as \$4 trillion.

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## Digital Procurement in Manufacturing: Restore Growth and Ensure Resilience

----- Arcticle source ----- https://www.wipro.com/blogs/damodar-sahu/digitalprocurement-in-manufacturing-restore-growth-and-ensure-resilience/-----About The Author Contact Wipro Please fill the required details to access the content Digital Procurement in Manufacturing: Restore Growth and Ensure Resilience April | 2021 Forty percent of companies surveyed in GEP's The Business Costs of Supply Chain Disruption report claim they experienced measurable damage to their brand image because of pandemic-related supply chain disruptions. Another 36% of organizations survey claim cyberattacks on supply chains are a growing concern. In total, the report estimates revenue losses due to supply chain disruptions to be as high as \$4 trillion. Over this course of 2020, procurement became a primary topic of discussion in boardrooms, due in large part to the efforts of procurement leaders and their teams to ensure business continuity and mitigate the impact of the pandemic on their organizations. More than a year later and with a possible end to the pandemic on the horizon, it is time for procurement leaders to pivot and demonstrate how to best manage spending and supplier relations to build resilience and to restore growth. Supplier relations: Innovation through collaboration Manufacturing procurement and supply chain organizations are tasked with building and maintaining a resilient supply chain. To do this, procurement must be able to effectively manage costs, ensure continuity throughout the supply chain, and mitigate risks proactively and completely. They should also focus on improving collaboration with suppliers, which could promote innovation and competitive advantage. At the executive level, attention is shifting in this direction. John Wookey, president of Intelligent Spend and Business Network at SAP, says "Every CPO is trying to think about how to make their suppliers

a more integral part of their innovation strategy and get them more engaged in the process." Innovation is essential to the health and success of your business. How well your organization stands out from the competition and overcomes disruptions depends on its ability to keep pace with rapid developments in technology. The best way to stay relevant is to harness the full potential of the next-gen procurement and supply chain technologies. Building a successful innovation strategy Technology can be very helpful for enhancing procurement operations, but what works for one organization may not work for another. Before deciding what sort of procurement technology to purchase, it is important to consider the specific needs of your business and possible solutions. From there, you can identify the technologies that will be most beneficial for your business and how to best implement them. This is especially important if your solution requires coordinated integration of multiple technologies or a phased approach. Investing time up front can save time and money in the long run. Achieving a truly resilient supply chain requires a holistic approach. Every procurement strategy, process, action must build resilience throughout procurement operations and the supply chain. Organizations can get more out of their innovation strategies by considering the connections between procurement and supply chain operations, and focusing on solutions that will have cascading effects: These are ambitious objectives and may seem hard for manufacturers to achieve on their own, but a comprehensive strategy and strong communication between procurement and supply chain can provide the necessary support. Benefits of digital procurement Digital procurement offers a range of benefits to nearly every aspect of a business. Through digital technologies and easy-to-use SaaS tools, digital procurement enriches day-to-day operations — automating repeatable tasks, boosting efficiency, reducing costs —while equipping stakeholders across the organization with real-time insights and advanced analytics. The table below offers a wider view of the potential business impact from digital procurement. Deliver rapid savings Improve supplier visibility Increase employee productivity Improve cash management Manage all spend: Indirect goods & services, direct materials, CAPEX, T&E... Digitize the full source-to-pay process Manage supplier risk Improve decision-making Enable business agility Grow revenues Accelerate time to market Drive Innovation Reimagining procurement can help business leaders capitalize on these disruptions caused by the pandemic by enabling them to build resilience throughout the supply chain — whether through increased emphasis on category management and dual sourcing, optimized inventory levels, regionalized supply chains or manufacturing/supply sources closer to key markets. Organizations can also put in place systems and processes to fix any identified issues across procurement and supply chain processes. The pandemic stressed the importance of business leaders investing in their teams to ensure they are able to work from anywhere. Going forward, procurement should prioritize solutions that enable them to stay connected with suppliers and extended teams, and work efficiently, from anywhere. This focused transformation will help businesses and their supply chains stay agile and resilient. Damodar Sahu Head of Global Strategic Alliances, New Age and SaaS Applications, Wipro Limited. Damodar is responsible for building Wipro's global New Age & SaaS Products Alliance and Partnership Program. With over 23 years of experience, he has a long history of accomplishment in the industry. He has a Bachelor of Technology degree in

## Powering Manufacturing Subscription

---- Arcticle source ---- https://www.wipro.com/blogs/damodar-sahu/ powering-manufacturing-subscription/ ---- About the Author Contact Wipro Related Blogs Partner Automation is Key to Maximizing the Manufacturing Ecosystem Three Ways to Optimize the Supply Chain to Become Customer Centric Five ways manufacturing companies can boost profitability Please fill the required details to access the content Powering Manufacturing Subscription June | 2021 The subscription model is fast becoming popular. While it was prevalent in the use of software, it's now gaining ground in everyday consumer usage as well. Research by Zuora and YouGov indicates that 90% of the people in the UK now have at least one subscription service. A survey by Coupon Follow with over 1,000 people indicated that consumers had two active subscription boxes on an average and spent about \$58 a month on these subscriptions. Subscription services are not just limited to consumer products. Subscriptions in the software world have been popularized through the rise of Software as a Service (SaaS) solutions over the last few years. Salesforce, a pioneer in SaaS solutions, provides cloudbased CRM applications for sales, service, marketing, and more, all through a subscription service. It has proven to be a successful business model for the company, and one that has since been replicated by several other companies including the largest global software companies. With the rapid pace of changes in technology, companies must ask a few pertinent questions - how to face the competition, how to ride the disruption wave, and how to stay relevant to the business and customers. Next-gen technologies for the subscription economy Next-gen technologies like artificial intelligence (AI), Internet of Things (IoT), automation and many more are disruptive. They are also innovations that essentially displace existing technological establishments. Several companies across industries have adopted these next-gen technologies to future proof their business, deliver services to customers with agility, reduce costs, and enhance operational efficiency. The tremendous amount of data and the ability to generate insights proffered by these technologies helps companies realize these benefits seamlessly. On Earth Day this year, Google pledged to run all of its data centers on carbon-free electricity by 2030. CEO Sundar Pichai tweeted: "Within a decade, we aim for every Google data center, cloud region, and office campus to run on clean electricity every hour of every day." While all these companies should be lauded for their sustainability efforts, the key reason why cloud service companies prioritize efficiency and sustainability is because the manufacturers own the assets, not the consumer. When companies become service providers from product vendors, they can easily be innovative and efficient. Manufacturers have faced an uphill battle during the pandemic - from supply chain and workforce

disruptions to demand upheavals. Yet, the overall outlook for the sector remains strong. While manufacturers were already looking at digitalization to enhance business, the COVID-19 pandemic accelerated these efforts. Zuora's annual Subscription Economy Index (SEI) has indicated that manufacturers with subscriptions in areas such as after-market services are continuing to see a 6% revenue growth. The report also noted that the subscription economy is resilient, and is showing steady growth. The subscription model and what it means for manufacturing In the last decade, among manufacturers, we have seen the automobile industry attempting to dabble in the subscription model. However, Tesla is one company that seems to focus on this - they start with the software that goes into the vehicle. This software then provides automatic upgrades directly to the customers. In turn, the data generated is leveraged for analytics to provide fresh insights into customers and enhance their experience. Subscriptions have been around for decades. However, with increased adoption of IoT, subscriptions have gained value and popularity. In addition, the stability offered by the recurring revenue model is a key growth strategy during the pandemic. Manufacturers are now beginning to adopt the subscription model. Honeywell has leveraged IoT to transform itself into an industrial software and services company. In early 2019, the company launched Honeywell Forge, its industrial IoT platform that provides insights to operators of buildings, airlines, industrial facilities, and other infrastructure. With a deep legacy of over 100 years, Philips has transformed its business to meet digital demands - from innovative healthcare to lighting as a service. The company launched Interact in 2018, a cloud-based IoT platform that could collect and analyze data gathered from lighting and other sources. Customers are for life The world is shifting to a new kind of business model. The way people buy has changed for good. It is time for your business to change. Customers have changed, with renewed expectations - outcomes, customization, hyper personalization, and continuous improvements. Customers want the subscription experience to provide: ongoing value, memorable experiences, on-demand fulfillment, anywhere real time availability, and personalized service. The subscription model is set to disrupt manufacturing. Companies can avail of the many monetization methods available: It is worthwhile to note that shifting to subscriptions is not good for subscribers alone. Subscription models create predictable, recurring revenue streams. The subscription economy is a new era with a new imperative for all manufacturers to turn your customers into subscribers. This will ensure a mutually beneficial relationship for everyone involved. Industry: Damodar Sahu Head of Global Strategic Alliances, New Age and SaaS Applications, Wipro Limited. Damodar is responsible for building Wipro's global New Age & SaaS Products Alliance and Partnership Program. With over 23 years of experience, he has a long history of accomplishment in the industry. He has a Bachelor of Technology degree in electronics and telecommunication engineering, and a master's in operations management from Amity University. Damodar's philanthropic work focuses on supporting education for underprivileged students in his village in Odisha, India. Manufacturers were once many steps removed from their customers, with wholesalers and distributors providing a crucial link to sales. With the titanic shift that has occurred in business, only customer-centric companies will survive. Manufacturing companies are under pressure. Cost of raw materials is rising, while increased competition is driving down end user

### Relevance of Intellectual Property for Startups

----- Arcticle source ----- https://www.wipro.com/blogs/sudipta-ghosh/ relevance-of-intellectual-property-for-startups/ ---- About the Author(s) Contact Wipro Please fill the required details to access the content Relevance of Intellectual Property for Startups A Study April | 2021 This paper presents an analysis of startups in the digital technology domain from the perspective of the World IP Day 2021 theme, "IP & SMEs: Taking your ideas to market". As per World Intellectual Property Organization (WIPO) [1] this theme represents "Critical role of small and medium-sized enterprises (SMEs) in the economy and how they can use intellectual property (IP) rights to build stronger, more competitive and resilient businesses". Our analysis takes into consideration some of the key startups actively developing technologies (patents) and/or having products/services related to digital technologies in selected industry sectors. It also tries to highlight influence of Intellectual Property on performance and sustainability of startups in the marketplace. Importance of IP for SMEs and Startups European Union conducted a study [2] recently on "Intellectual property rights and firm performance in the EU" that confirms the strong, positive relationship between a company's ownership of different types of IPRs and its economic performance. For example, SMEs with patent ownership are found to have 36% higher revenue per employees and 53% higher wages; SMEs with registered design are found to have 32% higher revenue and 30% higher wages; and SMEs with registered trademarks appear to have 21% higher revenue and 17% higher wages. Incidentally, it is found that revenue per employee and wage level are two key factors indicating company's performance. IP protection enables startups to preserve and exercise unique and differentiated product or service offerings in the competitive marketplace. One of the key success factors for a startup is to keep up with innovative offerings backed by carefully crafted Intellectual property rights such as Patents. Past studies [3] have established that startups or SMEs with registered intellectual property are more likely to receive funding for product commercialization. Another study [4] reveals that SMEs and startups that have at least one registered IP are 21% more

likely to experience a subsequent growth period, and 10% more likely to become a high growth firm. One of the key objectives of this analysis is to understand whether the same principle applies to startups as well across prominent geographies. Analysis and Insights The Information and communication technology space is buzzing with a large number of startups and a significant number of these startups are related to digital technologies. The scope of this analysis has been restricted to startups in digital technologies such as Artificial Intelligence (AI), Blockchain, Robotics and Augmented Reality-Virtual Reality (AR-VR) in selected industry sectors like Healthcare, Manufacturing, Supply Chain, Retail, etc. The analysis considers startups at the cross section of selected industry sectors and key digital technologies, those founded in the last 5 years (2016 onwards). The analysis also tries to highlight startup trends from the point of view of funding, IP ownership (Patents), geographies (headquarter of startup), startup sustenance (age factor), the traction score, etc. The traction score for a startup is indicative of potential of a startup derived from dimensions such as fund raised, growth rate, revenue, employees, etc. The study further tries to analyze distribution of startups across geographies and industry sectors, level of funding success across industry sectors, influence of patent on funding across industry sectors, and relative traction score in the marketplace. Prominent startups are identified from various sources such as Crunchbase, CbInsights, Startus-insights, Tracxn, etc. Patent information has been gathered from free and professional patent databases. This analysis is based on information available in public domain. In the process of discovery of top 200 startups from different publically available sources for each digital technology, the applicable industry domain and relevant business functions were identified from the list of startups. Figure 1 represents the count of startups in the cross section of digital technologies, industry domain and functional areas. Figure 1: Count of Startups in the Cross Section of Digital Technologies, Industry Domain and Functional Areas It is observed that Healthcare and BFSI industry domain along with AI and Blockchain technology has maximum number of startups. Among the industry domains, startup population was found to be significant in the functional areas of Diagnosis & Treatment, Geriatric Care Management in Healthcare; Inventory / Warehouse Management, Logistics Management in Supply chain; Customer Experience Management in Retail; and Financial Risk Management, Cryptocurrency Trading in BFSI. While looking from the digital technology angle, startup concentration appear to be more in AR-VR followed by AI and Robotics for Healthcare; Robotics followed by AR-VR in Manufacturing: Robotics followed by AI and Blockchain in Supply chain: AR-VR followed by AI in Retail; Blockchain followed by AI in BFSI. In the ENU industry domain, more number of startups were found to be working in AI technology space. Among the digital technology areas, startup population is found to be concentrated in Healthcare-Diagnosis & Treatment, BFSI -Financial Planning & Management for AI; Healthcare - Geriatric Care Management, Supply chain - Inventory / Warehouse Management in Robotics; BFSI - Crypto Asset Management, Cryptocurrency Trading in Blockchain; and Healthcare - Diagnosis & Treatment, Retail - Customer Experience Management, Manufacturing - Connected Assets / Workers in AR-VR. It is observed that startups headquartered in USA are prominent in AI technology in the industry domain of Healthcare followed by BFSI. Startups headquartered in China are prominent in Robotics in the industry

domain of Manufacturing followed by Supply chain. Startups headquartered in Singapore are prominent in Blockchain technology in the industry domain of BFSI. Startups headquartered in UK are prominent in Blockchain and AR-VR technology and in the industry domain of BFSI followed by Healthcare (See Figure 2). Figure 3: Patent Distribution by Industry and Functional Areas From the analysis, it is evident that Healthcare and Manufacturing industry domains along with AI and Robotics technology have seen more patenting activity. Among the industry domains, patenting activity was predominantly observed in functional areas of Diagnosis & Treatment, Geriatric Care Management in Healthcare; Product Manufacturing followed by Inventory / Warehouse Management in Manufacturing; Inventory / Warehouse Management followed by Logistics Management in Supply Chain; Shop Floor Operations Management in Retail; and Energy Consumption Monitoring & Control in ENU. In the BFSI domain, patenting activity was observed in Cryptocurrency Trading followed by Financial Risk Management and Cryptocurrency Mining. The startups are also showing interest in a few niche and emerging areas like Pharmacovigilance, Predictive Asset Maintenance, and Customer Experience Management etc. and are also having patent protection. Figure 4: Patent Distribution by Industry and Technology Areas From the perspective of digital technology areas, patenting activity was predominantly observed in AI and Robotics for Healthcare; Robotics in Manufacturing and Supply chain, AI in Retail and ENU; AI followed by Blockchain in BFSI. Figure 5: Geographic Distribution of Startups with Patent Portfolio Startups headquartered in China are actively filing patents with 37% having IP protection followed by startups headquartered in USA with 36% having patents. Startups headquartered in France are actively filing patents with 30.8% having IP protection as compared to other European startups. Startups headquartered in India are also protecting IP with 24.3% having filed for patents. It is worth noting that 98% startups received funding in BFSI industry, followed by 85% in ENU; 81% in Healthcare and Supply Chain; 71% in Retail, and 53% in Manufacturing. From the analysis of funding received by startups in the target set of startups, it is observed that 39% startups have patents in AI technology and they received 56% of the overall funding. In AR-VR, 23% startups have patents and they received 69% of the overall funding. In Robotics, 33% startups have patents and they received 71% of the overall funding. When looked at from the industry domain point of view, 46% startups have patents in ENU and they received 66% of the overall funding. In Healthcare, 42% startups have patents and they received 71% of the overall funding. In Manufacturing, 20% startups have patents and they received 64% of the overall funding. In Supply chain, 32% startups have patents and they received 74% of the overall funding Overall 28% startups were found to have patents receiving 48% of the funding in correlation with technologies and industry domains. Average funding amount of startups with patents is almost 2.5 times the average funding amount of startups without patents. Predominantly, more traction score was observed for the startups in the functional areas of Connected Assets / Workers, Predictive Asset Maintenance in manufacturing; Shop Floor Operations Management in Retail; and Logistics Management, Inventory / Warehouse Management in Supply chain. From this analysis, it is observed that startups with registered IP (patents) have more traction score and better funding opportunity across the industry domains and technologies worldwide. As per EU study cited

above, there is a positive correlation between companies' ownership of Intellectual Property and economic performance. Hence, one can conclude that startups owning Intellectual Property are likely to have advantage in economic performance, business potential and funding opportunity. know more details of the study, connect with us at ipr.wipro@wipro.com References Sudipta Ghosh Head - IP / Patent Management, CTO Office, Wipro Sudipta has about 26 years of experience across industries in the ICT technology areas encompassing R&D, IP Management, consulting, technology leadership, strategy formulation, global service delivery, quality management, partner collaboration, and M&A. He is Master of Engineering from the Indian Institute of Science, Bangalore and Post Graduate in Intellectual Property Law from IIT Kharagpur. Parag Arora Manager - IP / Patent Management, CTO Office, Wipro Parag has a breadth of exposure to different aspects of IP Management including IP Consulting, IP Analytics, IP Monetization, and IP Valuation. He has vast experience in handling and managing customer projects in emerging technologies like Blockchain, Autonomous Vehicle, 5G and AI, and Cognitive Computing. Parag holds a Graduate degree in Electronic & Communication Engineering from Thapar Institute of Engineering & Technology, Patiala. Esheetaa Gupta Manager -IP / Patent Management, CTO Office, Wipro Esheetaa has over 6 years of experience across different aspects of IP Management including IP Consulting, IP Analytics in emerging technologies like blockchain, AI & cognitive computing, and cloud computing technologies. She is instrumental in harvesting invention disclosures related to various technical domains, patentability assessment, promoting IP awareness, building a culture of innovation and conducting IPR awareness / training on patents & design. Esheetaa holds a Bachelor's degree in Computer Engineering, and LL.B. (Hons.) with specialization in Intellectual property law from Indian Institute of Technology, Kharagpur. She is also a registered patent agent with the Government of India Sudharm Mehta Lead Consultant - IP / Patent Management, CTO Office, Wipro Sudharm is vastly experienced in the different aspects of IP Management, such as IP Consulting, IP Analytics, and R&D. In addition, he has experience in managing customer projects in the areas of Energy Management Systems, Consumer and Industrial (C&I) Appliances, Smart Applications, Cognitive Computing/ Artificial Intelligence, Autonomous Vehicle (AV), and Chat-Bots. He holds a Graduate degree in Electronics and Instrumentation Engineering, and a Master's degree in Control and Automation, Electrical Engineering from the Indian Institute of Technology, Delhi. Raju A Assistant Manager - IP / Patent Management, CTO Office, Wipro Raju is highly competent in the various aspects of IP Management, such as IP Consulting, IP Analytics, and R&D., He has spent years managing customer projects in domains, such as Consumer and Industrial Appliances, Wind Turbines, Artificial Intelligence, Augmented / Virtual Reality, and Multi-Modal Systems. He holds a Bachelor's degree in Electrical and Electronics Engineering and is a registered Indian patent www.wipro.com/blogs/vignesh-balakrishnan/ ----- Author's Posts Contact Wipro Please fill the required details to access the content Vignesh Balakrishnan Vignesh Balakrishnan Lead Consultant, Strategic Deals- UK & I Vignesh has over 10 years of experience providing digital solutions and strategic consultation to a range of sectors, including travel, public sector, hospitality, transportation, and retail. He is an ITIL, Microsoft Azure and Six

## **Beyond the Pandemic: Key Priorities for Agility and Growth**

----- Arcticle source ----- https://www.wipro.com/blogs/vignesh-balakrishnan/ beyond-the-pandemic-key-priorities-for-agility-and-growth/ ---- About the Author Contact Wipro Please fill the required details to access the content Beyond the Pandemic: Key Priorities for Agility and Growth May | 2021 A report from Forrester predicts up to 20% of Fortune 500 companies will not make it through 2021 intact. "[For] some, their assets will be dissolved or purchased; others will just go out of business." One possible cause of this is a lack of strategy when investing in and utilizing technology. "The pandemic revealed the flaws in many companies' technology...and their tech leaders were found mired in Band-Aids like tech modernization, simplification, and consolidation." These predictions highlight the importance of strategic investment in technology. While technology can provide a range of capabilities that make a business more resilient and adaptable, effectively harnessing that potential requires a holistic approach. Moving into another year of the pandemic, it is imperative that technology companies look back on the successes and the failures, and learn how to better prepare businesses for the future. The following are the top three tech priorities for organizations to tackle the challenges of the pandemic in Agents of Transformation Agents of transformation refers to a new generation of technologists who possess all the personal and professional skills required to build resiliency throughout their organizations. Their primary objective is to enable digital transformation and deliver positive business outcomes such as nurturing a culture of innovation, effectively leveraging tools and technologies, and providing excellent leadership. In a survey conducted by Appdynamics, nearly 64% of technologists claim they're "being asked to perform tasks and activities that they have never done before" in their careers, while 81% claim that COVID-19 is putting unprecedented "technology pressure" on their organizations: from extending networks and enabling rapid shifts to remote work, to ensuring cybersecurity while keeping up with evolving protocols. To successfully navigate the uncertainty of this moment, businesses need to encourage agents of transformation throughout their organizations and invest in their initiatives. Transparency is a great place to start: 92% of technologists in the Appdynamics survey cited "visibility and insight into the performance of the technology stack and its impact on customers and the business" as the primary enabler for agents of transformation at this time. Workforce Transformation The events of 2020 made every organization

re-evaluate their operating models irrespective of the industry domain,

organization size, and location. According to the 2020 Harvey Nash/KPMG CIO survey, workforce enablement has jumped from CIOs' eighth priority to among the top three. They have realized that thriving in 2021 will require operating models that keep teams engaged, productive and adaptable to ever-changing circumstances. Looking ahead, there are three essential components to effective workforce transformation: enabling remote work, closing the skills gap, and increasing agility. We are at a turning point in the history of work. Like the Industrial Revolution, which moved us from fields to factories, the Information Revolution has been fundamentally changing work and life. The pandemic is further accelerating these changes, particularly how we work and from where. Working from home was once an exception, but as the pandemic spread organizations were forced to rapidly shift to remote work. Now, many organizations are functioning in a completely virtual environment, and this change may not end with the pandemic. A report by Forrester suggests that nearly one third of Europe's white collar workers are expected to work remotely full time in 2021. Employers are being encouraged to embrace remote working as a long-term solution, and to learn from their experiences with it over the past several months. For example, the pandemic has shown how important it is for businesses (especially global ones) to invest in tools that will help their teams connect and collaborate effectively. Data management is also essential here, as data plays a crucial role in monitoring and maintaining the team's efficiency across various workflows. Providing visibility into the data behind their work is crucial to understanding working patterns and will ultimately help empower, energize, and engage the team to continue succeeding remotely. Before the pandemic, self-development and upskilling may have been encouraged in employees. Now, that choice has become a necessity. To keep up with the unpredictability of the current market conditions, every member of an organization must enhance their competencies and start developing new skills. A tech skill strategy is key to organization-wide upskilling. Leadership must invest the time and resources into developing and accelerating it. Part of this responsibility is communicating the company's commitment to the workforce, and demonstrating how upskilling will strengthen employee as well as business performance. The next focus should be on creating a risk-free environment where the workforce feels comfortable learning (and failing) to accelerate their skill mastery. Upskilling teams needs to happen at a rapid pace to keep up with business demands. Data suggests that an employee needs an average of 70 days to climb up the ladder from one skill level to the other. By 2022, IDC FutureScape predicts "40% of the Fortune 500 will reengineer culture and collaborative practices—shifting from authorized to empowered teams, to enable upskilling to the highest level possible." Forward-thinking companies will take full advantage of the current climate of change ushered in by the pandemic. Change agility — the willingness and ability to alter and improve processes — is at an all-time high. Now more than ever, people understand that change happens whether they are ready or not. It's best to start adapting and adopting new ways of working as soon as possible to reap the maximum benefits. Software development leaders who had previously thought about switching to agile models should pull the trigger now — but they have to be prepared for this change. Leaders still need to build awareness and sell the idea to their development teams, then invest the right amount of resources to ensure everyone is properly trained. Resistance

to the change, however, should be a lot easier to overcome, thanks to 2020 chipping away at perceived notions about what is and is not likely to succeed. A recent report by Accelerated Strategies reveals that COVID-19 conditions have raised a sense of importance in DevOps and agile initiatives. The data shows a 52% surge in migration to cloud service providers like AWS, Google, and Azure. If a team can survive — even thrive — more than a year of nothing going as planned, they can adopt agile models successfully. Digital Acceleration Without a doubt, 2020 was the year of digital transformation and acceleration. Many organizations re-evaluated their digital strategies to transform their approaches from end to end. "Hyperautomation," according to Gartner, "is the idea that anything that can be automated in an organization should be automated." This idea has paved the way for CIOs to implement new-age technologies, including robotic process automation, business process management, artificial intelligence (AI) and machine learning (ML), to deliver outstanding customer experience. This will ring a bell for companies that implemented point solutions to survive in 2020. Those companies should automate their repeatable processes for their survival. As per the Forrester Predictions 2021, "more than a third of developers will use machine learning in 2021 to automate development activities." By 2024, IDC FutureScape Developer and DevOps 2021 Predictions estimates that "nearly 60% of new applications will be built and managed using microservices and containers as foundations for stronger and higher-performing automation." The demand for digital customer experiences is at its peak. Along with enabling the workforce and developing a tech skill strategy, it is one of the top three most important investments for CxOs in 2021. A big takeaway from 2020 and 2021 is that digitally mature organizations focus on technological investments that improve the digital experience and create revenue (AI/ML, big data and data analytics, and other emerging technologies such as 5G) while less mature organizations are held back by legacy systems, limiting their ability to enhance customer offerings. Looking ahead, organizations should strategize their investments in technology and look for holistic solutions that strengthen their operations and build resiliency. Vignesh Balakrishnan Lead Consultant, Strategic Deals- UK & I Vignesh has over 10 years of experience providing digital solutions and strategic consultation to a range of sectors, including travel, public sector, hospitality, transportation, and retail. He is

an ITIL, Microsoft Azure and Six Sigma certified professional skilled in handling multi-million-dollar deals across global service lines. His primary focus is on driving digital transformation and accelerating digital growth in the UK and Ireland through value-centric propositions for customers. Prior

to Wipro, Vignesh worked with Cognizant in business consulting and

#### AI powered IT Ops - Adapting to the accelerated changes in IT environments

----- Arcticle source ----- https://www.wipro.com/blogs/ankur-jalpota/aipowered-it-ops-adapting-to-the-accelerated-changes-in-it-environments/ -----About The Author Contact Wipro Please fill the required details to access the content ai-powered-it-ops-adapting-to-the-accelerated-changes-in-itenvironments May | 2021 The last decade witnessed several changes and transformations in IT operations. Cloud computing has displaced inhouse machine rooms, facilities and data centers. Containers create closer integration between developers and operations, and even standardize deployment. Transforming IT as an application and software services enables cost as well as capacity optimization. Artificial intelligence for IT operations (AIOPs) stages applies AI (machine learning - ML) and data science to help take care of IT tasks and increase capability. AIOPs consolidates huge information and ML usefulness to upgrade all essential IT operation functions, including identifying, investigating, and settling accessibility and performance issues. However, this impact of AI on organizations requires significant change and adjustment much compared to any previous technology developments. Therefore, organizations need to adopt appropriate change management practices as AI has the capability to accelerate change management and make it error free and human-centric. AIOps is therefore the core enabler for every business, steering technological progress toward modernization as well as cost optimization. SaaS is a significant driver for cloud adoption and development. SaaS gives organizations greater ability to improve efficiency in upgrading applications on their terms. Technologies and services must cooperate to be accessible and dependable. They should also be consumable in several ways so that organizations which rely on the cloud can accomplish their own unique business missions regardless of their underlying cloud techniques. Addressing the ask of contextualizing the business intent with personification of SaaS usability, is what now every major Cloud service provider and their locale of cloud innovators are doing. AIOps is making it possible to see the whole range of the IT environment, regardless of whether it's in the public cloud, the customer's cloud, or in a hybrid environment that may incorporate public and private clouds, just as on-premises technologies. AIOps as a Service connects the visibility gaps, guaranteeing elevated levels of reliability, accessibility, and operational intelligence. Artificial intelligence workloads are consuming a greater share of information technology infrastructure resources. AI is also taking up residence as an embedded component for managing, monitoring, scaling, securing, and controlling IT infrastructure. Increasingly, this emerging IT management paradigm of 'AIOps' refers to two aspects of the relationship of AI with cloud infrastructures and operations. On the one hand, it refers to AI as a

growing workload that infrastructure and operations are being optimized to support. On the other, it refers to the use of AI as a tool to make infrastructure and operations more self-healing, self-managing, selfsecuring, self-repairing, and self-optimizing. In this regard, the growing role of AI in IT infrastructure management stems from its ability to automate and accelerate tasks to be scalable, predictable, with more efficiency than manual methods. The interest in and adoption of AIOps has increased as organizations have sought to handle disruptors, increase innovation and more importantly, manage the volume and different types of digital data that cannot be done with human assistance. Without AI's ability to perform continuous log analysis, anomaly detection, predictive maintenance, root cause diagnostics, closed-loop issue remediation, and other critical functions, managing complex multi-clouds may become impractical or costprohibitive for many organizations. This does not imply that machines are replacing humans. Features like big data, AI/ML, and automation are required to deal with the transformation and for this ITOps professionals will need to enhance their skills. AIOps is creating new job roles for people and in no way reducing manpower. Wipro has been supporting multiple customers in the transformation of physical data center-based infrastructure to cloud-based SaaS and containerization. Wipro's expert team uses Docker and Kubernetes to create a channelized DevOps pipeline and then transform everything in IT as an application or a software service such as infrastructure, network or an end application. AIOps thus plays a role in implementing the DevOps pipeline on containers. This helps allocate the required capacity to the right resources and at right time in an agile manner. We leverage AIOps to understand available capacity and determine where and when it is required. Wipro's customers are able to innovate and deliver value to customers in turn in a sustained manner. During such times of enormous changes in technologies, infrastructure and market, the organizations that endure and thrive are those that adopt tech-enabled systems. Ankur Jalpota Global Practice & Business Head for BSM & AIOps Ankur works with technology partners in advancing and modernizing the tooling space and aligning the overall offering with the ongoing evolution journey. He is an evangelist for humanizing technology that focuses on end customer usability and ground level business impact. Ankur has played key roles in developing next-generation transformative offerings and executing ----- Arcticle source ----- https://www.wipro.com/blogs/radha-vuppalapati/ -----Author's Post Contact Wipro Please fill the required details to access the content Radha Vuppalapati Radha Vuppalapati Lead Consultant Data Analytics & AI, Wipro Radha is an expert in multiple analytical tools, datamining methodologies, and cloud computing technologies. She has worked on various analytics projects in the energy and utilities and banking domains. Her experience includes data analysis, proposing analytical solutions, generating dynamic reports, and other data preparation components, such as data pre-processing, profiling, cleansing, validation, 

## The Role of Artificial Intelligence in Fighting COVID-19

---- Arcticle source ---- https://www.wipro.com/blogs/radha-vuppalapati/therole-of-artificial-intelligence-in-fighting-covid-19/---- About The Author Contact Wipro Developing AI-Driven Insights for Containing the Pandemic Please fill the required details to access the content The Role of Artificial Intelligence in Fighting COVID-19 May | 2021 Artificial Intelligence (AI) has from the very beginning of the pandemic been busily working behind the scenes assisting the limitations of human knowledge in the massive endeavor of understanding and tracking the spread of COVID-19. Today multiple AI-powered projects based on data science, machine learning, and big data are being used across a broad range of fields to predict, explain, and manage the different scenarios caused by the health crisis. With AI use growing in the healthcare sector, it's predicting early COVID-19 symptoms and thereby control the spread of the infection. It's also being used to screen and track patients, as well as predict future infections, using algorithms that process data to identify insightful patterns. Machine learning is the main driving force behind AI's capability to detect these patterns. For example, in a given country, it may be possible to predict the number of deaths from COVID-19 in males over 60. This technology's algorithms allow healthcare organizations to effectively diagnose and customize medical care and follow-up plans, resulting in better patient experiences. AI is helping drive COVID-19 prevention at the molecular level (e.g., drug and vaccine discovery), the patient level (e.g., patient diagnosis), and the population level (e.g., epidemiological surveillance). As the following images outlines, AI enables physicians to accelerate their ability to treat patients and deliver effective care. Prediction and Tracking Healthcare professionals are studying the transmission rate of the pandemic by using AI in conjunction with these mathematical models: These models can theoretically predict the number of positive cases and the rate of transmission. Once these models have produced data, researchers can upload that data into HealthMap, an online information resource that collects the publicly available COVID-19 data, making it readily available to facilitate the effective tracking of its spread. Recently, AI has helped identify and forecast COVID-19 outbreaks by employing multidimensional data. Regularly, AI-driven tools are limited to one data type, which may not lead to an accurate measurement of the coronavirus's spread. In such a case, the use of multidimensional data can help support decision-making processes with higher reliability. As an example, AI is being used with anomaly detection (AD), which identifies abnormal and unfamiliar patterns in a medical image (such as a chest X-ray). AD can also be applied to either single-dimensional or multidimensional data. Without AI, AD-driven processes would be tedious for physicians to analyze and provide treatment for patients. Using the data AD generates, AI can be used to identify the most vulnerable regions by tracking the number of confirmed cases and recommending the necessary actions to curtail the spread. AI-based Vaccine Discoveries and Predictions Since the outbreak of the coronavirus, several AI-based approaches have been used to design vaccines. Natural languageprocessing models, especially language-modeling techniques, have helped

drive COVID-19 vaccine discovery. These models' algorithms analyze the data, which includes geographic locations and patients' social interactions, and provides recommended treatments, facilitating vaccine development. AI is also being used with the Vaxign machine-learning platform, which is based on supervised classification models, to accelerate the discovery process. AI is also furthering COVID-19 research in three major areas: binary diagnosis (whether COVID-19 is present or absent), studying lung abnormalities, and distinguishing COVID-19 from non-COVID-19 pneumonias. AI tools can predict the patient's need for oxygen therapy or incubation and the development of acute respiratory distress syndrome. With AI platforms, healthcare teams can determine the generalizability of treatments to multinational patient populations, integrate imaging and clinical information, analyze serial imaging data, and customize patients' steroid treatments. Additionally, by using natural-language tools to process clinical reports, machine-learning models are assessing radiology images to predict the need for intensive care unit admissions. Wipro's AI Solutions for Detecting COVID-19 Wipro is contributing to pandemic efforts and has developed a fully automated AI tool that detects COVID-19 based on CT scan images or chest X-rays. Our research teams have also developed the Covigilent app in association with Healthcare Global Enterprises (HCG) supported by the Karnataka government, Bhakti Vedanta Hospital in Mumbai, and Bangalore Medical College and Research Institute (BMRCI). Using deep-learning and machine-learning algorithms, the app is an advanced AI-powered cough-analysis and rapid COVID-19-screening tool. It helps in premature detection efforts, with a person's cough being the primary metric. The app discriminates COVID-19 coughs from those due to seasonal bronchitis and pneumonia. It captures audio and data, such as gender, age, and other health points, which are uploaded to a secure cloud server. AI algorithms then analyze the audio signals and identify those who are infected. Healthcare organizations are in crucial need of real-time decision-making technologies to help them decrease the spread of the coronavirus. Al's ability to mimic human intelligence in a proficient way is enabling healthcare professionals to guickly to understand the nature of the virus and develop vaccines for reducing its spread. This results-driven technology is driving screening efforts, analysis, predictions, and the tracking of current and likely future patients. It's also playing a role in tracking the confirmed, recovered, and fatality cases, enabling physicians to gain important insights on how to treat patients and end the pandemic. Radha Vuppalapati Lead Consultant Data Analytics & AI, Wipro Radha is an expert in multiple analytical tools, data-mining methodologies, and cloud computing technologies. She has worked on various analytics projects in the energy and utilities and banking domains. Her experience includes data analysis, proposing analytical solutions, generating dynamic reports, and other data preparation components, such as data pre-processing, profiling, cleansing, validation, and transformation. ================== ----- Arcticle source ----- https://www.wipro.com/blogs/kris-clelland/ -----Author's Posts Contact Wipro Please fill the required details to access the content Kris Clelland Kris Clelland Director of Talent Acquisition, ANZ, Wipro Kris Clelland has over 18 years of professional experience, predominantly gained within the IT sector. He has had the chance to build a successful career in Global/Senior Talent Acquisition Management, IT Specialist Recruitment and IT Sales Leadership & Management; building

#### How to Build a Diverse Workforce and Inclusive Culture

----- Arcticle source ----- https://www.wipro.com/blogs/kris-clelland/how-tobuild-a-diverse-workforce-and-inclusive-culture/ ---- How to Build a Diverse Workforce and Inclusive Culture About the Author Contact Wipro Please fill the required details to access the content How to Build a Diverse Workforce and Inclusive Culture May | 2021 I start this blog, as in 10 weeks, I have seen some amazingly diverse women employed into Wipro globally, including Sarah Adam-Gedge, Subha Tatavarti, Debra Underwood and Stephanie Trautman, and want to replicate these successes at all levels within every department. This philanthropy-driven organisation is changing the game in terms of the diverse nature of its global workforce. "Human progress never rolls in on the wheels of inevitability; it comes through the tireless efforts and the persistent work of dedicated individuals who are willing to be co-workers with God and without this hard work time itself becomes an ally of the primitive forces of social stagnation." — Dr. Martin Luther King, Jr. Martin Luther King Jr. was a champion and advocate of diversity & inclusion over 50 years ago, long before anyone referenced these terms. He spoke passionately about "all of God's children" working together. He consistently referenced that including everyone and being diverse in mind was not for the weak and would not be an easy change. But he worked hard to make a global shift, the way we are trying to do today. Moving forward, we need to increase our effort in this direction. The small cosmetic changes, and some of the larger rocks that we can challenge and iterate within a business of Wipro's size and growing nature, will ultimately result in huge outcomes of pushing the diversity needle (across all diversity metrics) in the right direction. Increasing Inclusion & Diversity efforts is not a simple, or an overnight change. It is most definitely not easy work, but it is critical work. It is also not just a Talent Acquisition (TA) action item, everyone has a role to play, from TA > Business Operations > Hiring Managers/Teams > Leadership, among others, all must be included. 3 ways to improve inclusion and diversity in the workplace Here are three starting tactics — including diversifying interview panels, increasing productivity/ performance of job postings, training and championing diversity leadership — that can help heighten and drive diversity and inclusion efforts. Iterate, update, and renew your job descriptions with much fewer requirements, with commercially aligned, gender-neutral/inclusive language Unlike the world's biggest sports stars making controversial comments, writing intelligent and engaging posts, and saying things that get noticed

globally by billions - this will likely never happen if you are in Talent Acquisition/Recruitment. However, making even the smallest changes, and running your ads through one of many diversity/gender de-coder sites, will certainly help attract the smartest talent from every diversity angle, not just the usual applicants we see for 20+ job openings in companies' career sites. Backed by scientific research, there is an art to writing the most effective, searchable and optimized job posting that will attract top talent from every demographic; background, religion, sexual orientation etc. Running your ads, pre-posting through sites

like Textio, Katmatfield, Talvista, TextMetrics and others, will 100% help you remove/replace wording like Rockstar, Strong, Lead (includes leader(s)), Individual(s), Decisions(s), Driven, Competitive, Expert, etc. Regardless of where you/your company/TA teams post your jobs, we need to ensure that the language, terminology, format and content will not turn talent from underrepresented groups away from your company and deter them from applying. Regardless of how arduous a task it is, it is critical to use inclusive language. Taking job adverts that have 30+ mandatory responsibilities, 20+ desirable skillsets and 5+ educational and certification requirements, does not give anyone in any market, let alone all sides of gender diversity any chance of being suitable for your roles. Defining whether the number of years of experience, level of skillsets, which degree or qualifications the person has are actually mandatory vs aspirational is an important byproduct of who applies. Setting honest boundaries on what the person will be doing is important, for not only the individual but also for retention and reducing attrition in the ranks. Wipro, as well as focussing on gender, sexual orientation, racial and cultural diversity, disability, and other areas in ANZ, is also putting a wide focus on talent engagement from Aboriginal & Torres Strait Islanders backgrounds. According to Independent Schools Australia, there were 15,395 Indigenous students enrolled in 929 Independent schools in 2020, compared to only 9,315 in 2015. This will remain a focus talent group for ANZ throughout 2021 and beyond. 2. Shape your end-to-end interview process by building diverse panels In a global study published in 2020 by PwC on Diversity Hiring, it was documented that racially and ethnically diverse companies are 36% more likely to outperform their competition. It is also widely published that companies who sit in the topguartile for gender diversity at board level / executive teams were 21% more likely to outperform on profitability and 27% more likely to have superior value creation. Globally, the highest-performing organisations on both profitability & diversity had more women in line (i.e. typically revenuegenerating) roles than in staff roles on their executive teams. In studies published by PwC on female talent and diversity hiring, it was recorded that when asked if companies ensured diversity of interview panel/interviewers throughout the interviewing process, 52% of companies stated they were ensuring diverse panels throughout the interview process. 21% were not ensuring it, but were exploring the concept/idea, and 23% were not ensuring and also were not exploring the idea! Wipro has taken many measures to help push the needle during a global hyper-growth period to help remove any potential obstructions during our interview processes. The business has taken 2 actions - Firstly, we globally carry out unconscious bias awareness training, as well as put all interviewers through Interview Certification Program (ICP) Training, including our Senior Leadership Teams. As a second measure, we are consistently trying to ensure that our interviewing panels

are diverse in nature, requiring that they include at least one female/ethnic minority interviewer in every process. In some organisations who publish diversity hiring metrics and data (and not a lot of companies openly share this stuff!), some global organisations (who have over 150,000 employees) depict that each interview panel must include at least two women and/or members of underrepresented minorities. Some of these companies have very happily announced that they were able to increase the number of female hires by 36-44% in less than 2 years. Employers/companies should not only select diverse interviewer panels but also put more work into training Talent Acquisition teams, Human Resources, Business Operations, Leadership and Executives on diversity interviewing so that they are well equipped to drive and champion inclusive recruitment efforts. It's impossible as human beings to remove 100% bias, but it is critical to teach, coach, mentor and train interviewers to be conscious of their bias, even when unconsciously taken into a process. Be a champion for change, pull others up on bringing unwanted bias into interview processes, and don't be scared to manage your own bias by catching yourself, by changing some of the unwanted habits you've picked up over your lifetime. management to be fully prepared to hire and lead diverse teams Consistently hiring for diverse talent is very challenging, and many techniques, platforms and tools will only help a little, but even increasing backend productivity by 0.1% across all areas will make a huge difference at the front-end, so do not be disheartened by what is difficult, as everything worthwhile in life, has its difficulties. Managing a diverse team of people, small or large, who come from different backgrounds and experiences is also difficult. During our recruitment processes, we often look for individuals with leadership skillsets, and this is at all levels. We do not look for "managers", we look for leaders, and not by title/designation, but by skillset, mentality and work ethic. Think like a leader, act like a leader and leadership titles and responsibilities will follow. We often look for experience working in, and managing cross-cultural teams and when onboarded, Wipro leadership work endlessly to ensure that all of the right behaviours are being displayed when managing all diversity categories. Wipro's L&D team identify training and certifications needed (both internally and externally) and push these onto all employees and leaders to ensure seamless transition into a multi-cultural organisation like Wipro. If your organisation is not as mature as some, and L&D, Training Depts and teams around you are not able to utilize the power of courses, LinkedIn Learning offers a wide range of online courses, including Managing Diversity + Managing a Diverse Team. LinkedIn Learning has courses like Diversity, Inclusion, Belonging for All, among others that can assist in getting anyone up to speed prior to training internally within your organisation. How does it make a difference -Facts and industry changes In ANZ alone, since March 2020, 70% of the increase in unemployment is amongst women! This has seen the female unemployment rate rise from 4.4% to 5.4%, while the male unemployment rate has risen from 4.1% to 4.5%. The impact of COVID-19 has been utterly devastating for women in the workforce. Millions have lost or left their jobs, and a recent analysis revealed that while men in the United States gained about 16,000 net jobs in December 2020, women lost a net total of 156,000 jobs. After a huge decline from March to May 2020, the share of women among new hires surged back almost as quickly as it fell. In fact, the global gender split of new hires in January 2021 was 1% more female than it was in

January 2020. An interesting fact from 2021, is that the job of the moment is no longer Technical Architect, DevOps Engineer, Software Developer, Cloud Solutions Delivery Lead, AWS Engineer etc. It is in fact, a job category and designation that almost everyone agrees not one person is a perfect fit for, knows what exactly the ideal principals and best practices actually look like on paper, what the mandatory/core/desirable responsibilities are, or even what the name of the role is... However, there is a growing argument for these positions and their critical place in any workforce: whether you call these individuals Chief Diversity Officer, Head of Global Diversity & Belonging, Vice President Diversity & Inclusion, Sr. VP HR - Diversity, Director of Diversity, Diversity & Inclusion Manager, Diversity Business Partner, Inclusion Specialist - we all know that these roles will be critical to any organisation's ability to thrive, grow, innovate, compete and win the best talent across the globe. Diversity roles in general are on the rise, and leadership roles within Diversity are growing at a rate of knots. Figure 1 shows the growth of job titles in diversity over the last 5 years (2015 vs 2020). Some examples of this growth from 2015 to 2020 include Diversity Consultant growing 302%, Head of Diversity growing 107%, Director of Diversity growing 75%, and Chief Diversity Officer growing 68%. Final words Many people think that there is a science to everything...well! Wholeheartedly, I believe there will never be a perfect science to the art of acquiring talent, and recruiting the world's biggest and brightest. Dedication, being a champion of change, and moving the needle as far as possible takes effort, and with effort comes success. You will never know unless you try! "Do not look the other way; do not hesitate. Recognise that the world is hungry for action, not words. Act with courage and vision." Famously quoted by Nelson Mandela, this statement can almost be applied to anything, but can most definitely be applied to Diversity, Equity and Inclusion in the workplace. Too many companies and individuals say they are trying to make changes but continue to do what they always have. Embrace the change, try endlessly to assist and start to be recognised as a champion for change, while making a difference to you and those around you. It's not just you who need to embrace this shift in society, but everyone at your company too. If you are interested in knowing about the approach to Inclusion and Diversity at Wipro, connect with us @ info@wipro.com Kris Clelland Director of Talent Acquisition, ANZ, Wipro Kris Clelland has over 18 years of professional experience, predominantly gained within the IT sector. He has had the chance to build a successful career in Global/Senior Talent Acquisition Management, IT Specialist Recruitment and IT Sales Leadership & Management; building Talent Acquisition and Recruitment teams for organisations like Amazon Web Services, Planit, Zip Co and now, Wipro. Starting off with an Engineering degree, he moved guickly into pre-sales technical solutioning, IT sales/management and now in global leadership within Talent Acquisition. He is highly passionate about truly leading, (not managing) teams with particular focus on Diversity, Equity & Inclusion (DE&I), Eliminating Bias & Discrimination, Early Career/Graduate hiring, Digital Transformation & Talent Process Automation, Employer Branding, Organisational Agility, Candidate Experience and Recruiter-Tailored Technology, Remote Working & Virtual Recruiting.

Pradeep Kellangere Cloud Strategy and Architecture Pradeep has over 20 years of experience in defining technology strategy, architecture solutions to solve business problems for enterprise customers. He is currently responsible for driving cloud adoption and modern architecture for Banking and Financial Services customers across North America.

### Financial Services & The Cloud: Innovation & Transformation

----- Arcticle source ----- https://www.wipro.com/blogs/pradeep-kellangere/ financial-services-the-cloud-innovation-transformation/ ---- About the Author Contact Wipro Please fill the required details to access the content Financial Services & The Cloud: Innovation & Transformation May | 2021 Today, every sector operates in an era of great disruption, driven by digitalization and unprecedented levels of innovation: New products and services, new business models, and new competitors. The financial services industry in particular is in the throes of dramatic change, with established incumbents vying with upstart fintech companies to grow their businesses and increase market share. All seek to be more innovative, with cloud computing being a linchpin of this new, highly competitive arena. Winners embrace the cloud because it enables innovation, enhances business agility, and provides an immense capacity to scale up. The cloud enables business and product teams to guickly create and deploy new customer experiences in a natural, seamless way. It can enable a cloud-based contact center that can scale on demand and enable customer interactions on their platform of choice. And for operations teams, it can offer new ways of reimagining business processes - and accelerate the journey from idea to implementation. In short, the cloud lets firms do more, do it faster, and do it with an increased probability of success. The "pure digital" fintech companies know these benefits already; the cloud is their default infrastructure, which gives them an edge over firms that rely on mainframe architectures. But transforming incumbent players to the cloud can be done - and it's important to do it right. What does cloud transformation look like for financial services firms? Driven By Strategy & Technology In Wipro's view, adopting cloud computing is not solely a technology initiative. The most successful cloud transformation occurs when strategic business needs and technology come together. It's best to drive cloud initiatives from the senior leadership level; alignment and conviction are critically important. Paying attention to these key factors can catalyze successful cloud transformations: The benefits of a cloud transformation do not come easily for firms that have been in business for decades. Their existing core systems and legacy technology represent a substantial hurdle. In addition, cloud projects pose others challenges that it's best to be aware of before implementation: Partnering in the Journey Wipro has worked across multiple industries and sectors to enable successful cloud transformation journeys and has built strong capabilities around defining transformation constructs and blueprints to bring speed and scale to the effort. Wipro focuses on three aresa to drive the cloud transformation efforts. Strategy: Grounding the transformation approach

focuses on understanding and defining the strategic intent, business drivers, building the funding model (which might be self-funding, reduced TCO, etc.), and defining the operating construct and program governance. Cloud Migration: Wipro has a well-defined cloud migration and modernization framework starting with discovery and assessments, defining the disposition strategy, move group planning, design, and migration execution. This is supported by a proprietary Cloud Studio offering with industry-adopted tools and blueprints to ensure successful cloud-adoption journeys. Operations: When a firm is successfully up and running on the cloud, ongoing operations require a strong foundation of observability and resiliency, with well-defined operational processes. Wipro's Digital Ops Center helps ensure ongoing cloud success with the required toolsets and monitoring capability. Next Steps For more and more financial services firms, the question is not "whether" they'll adopt a cloud approach to their IT infrastructure, but "when." The challenges are substantial, but so are the benefits. When it's time to think about a cloud journey, Wipro can help design, implement, and manage a transformation that will add value in the near-term and in the future. References: Pradeep Kellangere Cloud Strategy and Architecture Pradeep has over 20 years of experience in defining technology strategy, architecture solutions to solve business problems for enterprise customers. He is currently responsible for driving cloud adoption and modern architecture for Banking and Financial Services customers across North www.wipro.com/blogs/stephen-lewis/ ----- Contact Wipro Blogs By Author A Data-Driven Approach to Scaling AI in Banking Reimagining CX: Start with the Customer Perspective Please fill the required details to access the content Stephen Lewis Stephen Lewis Consulting Partner - Digital Consulting Steve has 25+ years experience in shaping and leading large scale business transformation enabled by AI and Automation technologies including expert systems, analytics, conversational AI, voice biometrics and RPA. Steve is passionate about taking an outside-in customer centric approach to transformation that combines the best of human capabilities with AI (think Augmented Intelligence not just Artificial Intelligence), analytics and automation. The world of financial services is always a dynamic one, but banks today are undergoing a major shift. The COVID-19 crisis has accelerated digitisation plans across every industry and a lot of those involve reimagining the customer experience (CX).

## Reimagining CX: Start with the Customer Perspective

---- Arcticle source ---- https://www.wipro.com/blogs/stephen-lewis/ reimagining-cx-start-with-the-customer-perspective/ ---- About the Author Contact Wipro Please fill the required details to access the content Reimagining CX: Start with the Customer Perspective May | 2021 The COVID-19 crisis has accelerated digitisation plans across every industry and a lot of those involve reimagining the customer experience (CX). A recent scan of company strategic plans confirms some bold aspirations in this

regard: These are significant, and worthy, goals. There has never been a better time to reimagine the customer experience given the enormous advances in technologies like intelligent automation, machine learning, and advanced analytics. However, a 2020 McKinsey survey found that only 21% of executives have the expertise, resources, and commitment to pursue new growth while more than 2/3rd of them believe this will be the most challenging moment in their executive career. The reality is, as much as 70% of digital transformation projects fail. Wipro has immense experience applying today's technologies to the challenge of digital transformation, including the use of intelligent automation to transform the customer experience. Here are three practical steps for enterprises with transformative CX goals: Further reading: Stephen Lewis Consulting Partner - Digital Consulting Steve has 25+ years experience in shaping and leading large scale business transformation enabled by AI and Automation technologies including expert systems, analytics, conversational AI, voice biometrics and RPA. Steve is passionate about taking an outside-in customer centric approach to transformation that combines the best of human capabilities with AI (think Augmented Intelligence not just Artificial 

#### Digital Value Mining: A Data-Driven Approach to Scaling AI in Banking

----- Arcticle source ----- https://www.wipro.com/blogs/stephen-lewis/a-datadriven-approach-to-scaling-ai-in-banking/ ----- About the Author Contact Wipro Please fill the required details to access the content A Data-Driven Approach to Scaling AI in Banking November | 2021 The world of financial services is always a dynamic one, but banks today are undergoing a major shift. One of the impetuses to change has been the rise of digital challenger banks, sometimes called "neobanks," which have increased fourfold from 60 in 2018 to 256 in early 2021. The power of digital technologies is also growing, and banks across the globe are eager to reinvent themselves and deliver world-leading customer experiences. Banks have exceptionally high expectations for solutions powered by artificial intelligence to increase profitability and enhance competitive advantage, and for good reason. To cite just two examples: AI has reduced mortgage decision-making from two weeks to one hour, and AI helped a major US bank reimagine know your customer (KYC) processes, reducing cycle time and costs by 40%. These are great applications of smart technologies that benefit customers and banks. However, achieving such dramatic results doesn't come easy. It requires a holistic approach that challenges existing operating models and ways of working. It requires thorough integration of new digital technologies with existing legacy environments. And it requires the acceleration that only AI and machine learning can provide to mine the massive data sets that banks possess and generate insights that can lead the enterprise forward. Mining for value - the hard way While many banks are keen to start reaping the benefits of AI at scale, reimagining how processes can and should work is

costly and complex. In many organizations, this remains essentially a manual exercise, conducted by consultants. Today's banking consultant might feel somewhat akin to a gold miner from the 1800s, burrowing deep into the organization and its labyrinth of legacy systems looking for major transformation opportunities. Only then are they able to reimagine the organization's processes and systems with an eye towards the application of digital technologies and automation while ensuring measurable business and customer value. The consultant's journey must also take into account the evolving product and regulatory environment that is part and parcel of the financial services business. For banks, mining often feels like a neverending cycle of discovery, documentation, and redesign. This upfront human effort may be daunting to many in the financial services sector, especially firms saddled with decades-old legacy systems and processes. In fact, the effort is so intense that AI still has not yet created systemic changes in the financial services industry - even though it's very clear that the time is right. Some experts say 70% of digital transformation initiatives fail because they lack the resources, expertise, and commitment that are needed. Who hasn't experienced the frustration of a customer service bot that feels like a barrier to expert help? Or a slick online application process that ends up requiring multiple emails and phone calls before the consumer gets the intended product? All too often, this rocky digital journey can lead to plenty of collateral damage, failed business cases, technical debt, burnt-out staff, and frustrated customers. Mining for value: The digital way Perhaps we can learn something from today's gold miners. Most of the world's easy-access gold has already been mined, and the cost of exploration often exceeds the value of discovery. Today's mining companies are applying AI and machine learning techniques to massive geological data sets, essentially augmenting the capabilities of a trained geologist with the power of AI. This enables them to rapidly uncover hidden insights and focus exploration efforts to improve returns on investments. Similarly, leading financial services organizations are beginning to test the potential of AI-based value-mining techniques to improve discovery and opportunity identification across vast data sets related to organizational workflows. For example, every step of a credit card application — from receipt and the credit report check all the way through to acceptance and card delivery — leaves a digital footprint. AIbased process mining software can ingest vast amounts of this data and rapidly deliver insights on what's happening throughout the process. enabling consultants to answer questions such as: The possibilities for insights and improvement are endless. In the hands of an experienced consultant, AI-based process mining can shine an extremely powerful light on what is happening operationally to help shape a bank's transformation journey to benefit both customers and employees. Even better, automated digital value mining can uncover these insights in days, not weeks or months, enabling consultants to focus on the value-creating opportunities. Wipro used this approach in a recent end-to-end review of payment processing for a major global bank. It enabled the team to rapidly quantify the impact of manual fraud checking on turnaround time and uncover best practice approaches across decentralized teams. This enabled us to reimagine an enterprise-wide approach using automation to reduce rework by 20% and fraud investigations by two days. Using AI to mine data leads to a smarter, more holistic, data-driven approach to business reimagination that promotes the application of technologies like intelligent automation, AI,

and advanced analytics to create dramatically different ways of working. By bringing together the best of talent and technology — in a well-sequenced manner, across departmental boundaries — banks will be ready to compete with digital challengers. Next time you bring disparate teams together for a customer service request, ask them how well the processes are understood end to end and what reimagination opportunities have been found that transcend departmental boundaries. You might be surprised. To learn more about Wipro's AI-based data driven approach to value mining and reimagination, visit us or contact us at https://www.wipro.com/contactwipro/. Stephen Lewis Consulting Partner - Digital Consulting Steve has 25+ years experience in shaping and leading large scale business transformation enabled by AI and Automation technologies including expert systems, analytics, conversational AI, voice biometrics and RPA. Steve is passionate about taking an outside-in customer centric approach to transformation that combines the best of human capabilities with AI (think Augmented Intelligence not just Artificial Intelligence), analytics and https://www.wipro.com/blogs/mahesh-g-raja/ ---- Blogs by Author Contact Wipro Please fill the required details to access the content Mahesh G. Raja Mahesh G. Raja Vice President & Sector Head - Banking and Financial Services, Americas Mahesh is Wipro's Banking and Financial Services industry leader supporting top-tier full-service banks, large payments, and Fintech clients across US and Canada with P&L responsibility. He leverages Wipro's Digital, Fintech/New Age ecosystem, which includes developing partnerships with leading Fintech players, helping clients assess the Fintech ecosystem and potential implications to their business, and bringing solutions to clients through alliances and implementation.

## Hyper-personalization: the next phase of banks' digital evolution

---- Arcticle source ---- https://www.wipro.com/blogs/mahesh-g-raja/hyperpersonalization-the-next-phase-of-banks-digital-evolution/ ---- About the Author Contact Wipro Please fill the required details to access the content Hyper-personalization: the next phase of banks' digital evolution May | 2021 The banking industry had been making steady technological advances: Banks have been investing very heavily in going digital over the last decade. Most of these digital investments have been around omni-channel convergence, big data, analytics, customer journey mapping, user experience, chatbot and other self-service capabilities. Cloud adoption is still nascent in the Financial Services (FS) industry, and Financial Institutions (FIs) are gradually moving forward with their plans to migrate to the cloud. Today, most banks boast digital features that help their customers conduct basic banking remotely, using a browser or a mobile app. This movement has led to lower footfall into bank branches and has helped banks optimize their costs and capital expenditures. Growing use of AI in personalization What do you believe will be the most valuable use of artificial intelligence for banks? Select one. (% of respondents) Source: The Economist Intelligence Unit For

the FI's, their investments in digital have paid off well. Most of them have seen growing volumes of interaction over digital channels. Most have a robust omni channel offering with the ability to allow their customer to acquire products or services without having to go to the branch. External competition to accelerate the speed of change: Technology led innovations have been ongoing in the banking industry. However, with the arrival of technology players like Facebook, Amazon, Apple, and Google (FAAG) in the traditional turf of FI's, the pace of innovation has increased rapidly. In addition to the big-tech players, FinTechs are also creating superior customer experiences for small portions of the banking value chain. From mortgages, to payments, to cards, the new age players are continuously breaching the bastions of banks. What next for Banks: Personalization in the context of Banking is not just about the next best product offer however, using data and analytics to anticipate customer needs, which could be a product or service or advice and offering it to customers at relevant interactions with the bank creating a "nudge". Meanwhile, doing this in realtime i.e. 'hyper-personalization' can expand or deepen the current customer relationships and increase trust. Today, the marketing offers from the banks are mostly mass mailer-based campaigns, offering credit cards, investment accounts etc. There is an opportunity for the banks to move away from mass marketing campaigns into hyper-personalized and targeted individualized offerings for their customers based on their interactions. This can potentially increase the acceptance rate of the offer and improve stickiness, trust, and loyalty. Case study: Promote financial wellbeing for customers, helping them save through goals, insights & nudges A Large Bank set and track a savings goal for the customers through the bank app The bank's adult Financial Wellbeing Survey found active saving and not borrowing for everyday expenses, to be the most prominent behavioral drivers of financial wellbeing. In Oct 2019, it launched the 'set a savings goal' feature in the bank app to help customers better manage their money and develop healthy savings habits. From July 2020, customers began receiving personalized inapp notifications that encouraged them to set a goal, stay on track and celebrate milestones along the way. How customers are feeling about the savings goal and notifications feature: Pre-cursors to Hyper-personalization: Hyper-personalization requires banks to acquire a comprehensive view of their customer, assimilating information from varied sources, correlating the data in real-time and using predictive models to make relevant offers across their choice of channels. Often, banks fail to get a comprehensive view of their customers and their interaction history because of the silos in the organization that prevents them from collaborating across LOBs for the data. To be successful, banks need to break the data silos and work across Business, Marketing, and Technology to create a seamless user experience. Once the data silo is gone, the next would be to fine tune the predictive model based on the customer interaction journey. There are opportunities to enrich the experience through augmenting bank data with external data sources that provide the view of the customer that is missing with the bank. For e.g., the extended ability to access information of a customer who may bank with other financial services provider would truly help fine-tune the models to provide contextual and personalized offers. Envisioning the Hyper-personalization journey: The move towards approaching every customer interaction, irrespective of who initiates it, as an opportunity to expand and deepen customer relationship through personalization, starts

with acknowledging the gaps and creating a vision around it. Once this vision is established, it needs commitment and sponsorship from management to make it a reality. Cross functionally empowered teams need to be formed with participation from Business, Risk, Marketing and Technology stakeholders that can then iterate quickly in an agile fashion to create MVP. A start small and fail fast approach helps the bank develop a feedback loop to realign and test the hypothesis. Hyper-personalization is a powerful business differentiator, and banks stand to gain significantly from acting on it quickly and having the first mover advantage. You can find out more in Wipro's new report on hyper-personalization, in which we examine the changing landscape of customer engagement in the financial services space, along with imperatives for incumbents. Mahesh G. Raja Vice President & Sector Head - Banking and Financial Services, Americas Mahesh is Wipro's Banking and Financial Services industry leader supporting top-tier full-service banks, large payments, and Fintech clients across US and Canada with P&L responsibility. He leverages Wipro's Digital, Fintech/New Age ecosystem, which includes developing partnerships with leading Fintech players, helping clients assess the Fintech ecosystem and potential implications to their business, and bringing solutions to clients through alliances and implementation. Supported By: Tarun Kumar (Senior Manager - Wipro Insights) Shri Dhar (Senior Manager - Wipro Insights)

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## Innovation and Opportunities Drive Wipro and our Teams into 2023

----- Arcticle source ----- https://www.wipro.com/blogs/mahesh-g-raja/ innovation-and-opportunities-drive-wipro-and-our-teams-into-2023/-----About the Author Contact Wipro Please fill the required details to access the content With 2022 behind us, we reflect upon a year that brought new opportunities, partnerships, and successes. We invested heavily in technology, such as Wipro FullStride Cloud Services, to help our clients leverage business opportunities, and we announced strategic partnerships to provide our clients with the best solutions while leveraging the strengths of both organizations. Wipro also received continued recognition in 2022 as an Employer of Choice and strengthened philanthropic and sustainability pursuits. In 2023, we will keep innovating and developing solutions that help our clients and our employees navigate change, thrive in an increasingly digital world, and continue to forge a more sustainable future for all. Prioritizing Clients At Wipro, we work with various companies, from local and regional to global and industry leaders. We are honored to be a part of their success stories. Producing real results for our clients is incredibly gratifying. We take pride in hearing that our work has contributed to our client's growth and profitability. Client engagement is a priority at Wipro. We were happy to return to in-person meetings to engage with our clients faceto-face. We opened our locations around the globe, inviting clients to interact with the teams working on their accounts. Clients visited our

innovation centers, technology engineering studios, our campuses, and town halls, and we worked to turn these visits into memorable experiences. Wipro Engineering Studio inauguration to support our clients Team at the Money 20/20 conference Team at the Money 20/20 conference The FINOS Open Source in Finance Forum Insights, Solutions, and Innovations We showcased various themes and solutions in 2022, including cloud transformation, modernization, cyber security, data analytics, and artificial intelligence, and we have strong channels to take these themes to our clients and the markets. Our investments in Wipro FullStride Cloud Services have increasingly become imperative for businesses of all types — taking a front seat on the CEO's agenda. Wipro FullStride Cloud Services research shows that firms leveraging the cloud transform every aspect of business and drive 10X ROI. Wipro Banking and Financial Services (BFS) team is committed to providing world-class thought leadership and insights to our clients monthly. Wipro offers various solutions for our clients, valued partners, and service providers. We want to keep our clients ahead of the curve by offering the right combination of people, processes, and technology. Wipro's Always On Campaigns and account-based outreach programs provide thought leadership for banks and payment companies with customized content and insights through newsletters, social media, and other initiatives. Through digital ads, Wipro shares insights in various industry trade publications, including American Banker and Banking CIO Outlook, providing subject matter expertise on various themes, including cloud, cyber security, and end-user computing. Acquisitions and Partnerships In 2021, Wipro acquired Capco, a global banking and financial services management and technology consultancy company, making it one of the largest providers of integrated, end-to-end consulting, digital, cloud, and IT transformation services. The acquisition promises to expand our capabilities in the banking and financial services market while bringing us closer to more customers worldwide. In 2022, Wipro acquired Rizing, combining Wipro's global scale with Rizing's industry expertise and SAP consulting capabilities. Additionally, Wipro acquired Edgile to strengthen its leadership in strategic cybersecurity services. Wipro collaborates with its partners to provide clients with the best solutions while leveraging the strengths of both organizations. Wipro also produced several joint thought leadership assets with partners, including an eBook with Microsoft, titled: Re-imagine the Future of Financial Services We participated in the Informatica Cloud Modernization Data Day for Financial Services featuring James Jeude, Practice Leader, Data and Analytics Advisory at Wipro, and James McGeehan, Head of Financial Services Industry at Snowflake. The webinar's objective was to discuss how financial services organizations leverage modern cloud data platforms for their top business priorities and what it takes to realize measurable business value from those investments. Employer of Choice In 2022, Wipro was named "Top Employer in North America" by the Top Employers Institute. Wipro's effective use of technology to streamline processes, career development focus, ongoing support for employees' emotional and mental well-being, and efforts to provide employees with flexibility in where and how they work are contributing factors that make Wipro a top employer of choice. The character of Wipro that makes it a great place to work is fueled by the Spirit of Wipro, which consists of four tenets: First is a dedication to being passionate about our client's success, which inspires us to innovate and build new solutions to help our clients navigate change and thrive in an

increasingly digital world. We also strive to be global and responsible by continuing to develop our presence through strategic investments and prioritizing the health and well-being of our communities. One example is our work with the Azim Premji Foundation, which provides COVID-19 relief, invests in sustainable business practices, partners with schools to support early career development, and offers training to help employees keep up with industry changes and new technologies. We treat each person with respect, working to deliver the highest quality services to our customers and supporting our employees. We demonstrate unyielding integrity and take great care to weave our company's values throughout everything we do our work with clients and our internal teams, community outreach, and sustainability initiatives. The Diversity of Wipro. We are a global company that attracts, develops, and retains a productive and diverse talent base of 250,000-plus employees representing 133 nationalities across 66 countries. This diversity helps us remain innovative, adaptable, and connected to the communities in which we operate — and we remain dedicated to promoting equity and inclusivity in all we do. We integrate diversity into our work, encourage employees to be their authentic selves, and provide sustainable work environments free from discrimination and harassment. For example, Wipro's LGBTQ+ inclusion efforts are guided by the PRIDE framework, which emphasizes promoting an equitable workplace, reviewing policies to make them more inclusive, driving change through awareness sessions, and engaging with allies while building a strong employee network. Our Commitment to Sustainability. Wipro is committed to creating a humane, sustainable, and resilient future for all. We have pledged to reach planetary Net-Zero Greenhouse Gas emissions targets by reducing emissions to zero by 2040 and attaining a 55 percent reduction by 2030. As a founding member of Transform to Net Zero, Wipro is committed to contributing to the planetary zero carbon emissions journey by making sustainability the core of our business model today. As a leader in sustainability, Wipro strives to help companies monitor their sustainability progress and identify ways to reduce waste, preserve resources, and reduce their carbon footprints to help them build a more sustainable future. Industry Recognition In 2022, Wipro was recognized by several top industry analysts for its work in banking and financial services. We were named leaders in digital banking, open finance IT services, cloud services, IT services, and loan origination. 2022 was a great year as we made new connections, new acquisitions, and new partnerships. We moved closer to our sustainability goals and worked harder to integrate diversity into our work. In 2023, we look forward to new challenges, further leveraging our partnerships, growing our business, and discovering more ways to bring the Spirit of Wipro to our clients. Mahesh G. Raja Senior Vice President & Sector Head - Banking and Financial Services, Americas Mahesh is Wipro's Banking and Financial Services industry leader supporting top-tier full-service banks, large payments, and Fintech clients across US and Canada with P&L responsibility. He leverages Wipro's Digital, Fintech/New Age ecosystem, which includes developing partnerships with leading Fintech players, helping clients assess the Fintech ecosystem and potential implications to their business, and bringing solutions to clients through alliances and implementation. ============== ----- Arcticle source ----- https://www.wipro.com/blogs/dhanasudakarvasudevan/ ---- Author's Posts Contact Wipro Please fill the required details to access the content Dhanasudakar Vasudevan Dhanasudakar Vasudevan

## Social Distancing and Contact Tracing Solution for COVID-19

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## Rewiring the world of work through enhance employee experience

----- Arcticle source ----- https://www.wipro.com/blogs/abhinav-rajan-s/ rewiring-the-world-of-work-through-enhance-employee-experience/-----About the Author Contact Wipro Please fill the required details to access the content Rewiring the world of work through enhance employee experience May | 2021 Till approximately 20 years back, the focus of companies with regard to their resources was to improve their productivity and daily output delivered by them. In the 70s and 80s, the focus shifted to employee satisfaction. However, employee satisfaction was more about the employee's relationship and loyalty with the company. In the early 2000s, organizations started to realize that employees should be viewed as an asset to their brand. Increasing attrition made organizations think about the satisfaction coupled with happiness of the employees. This gave rise to the term employee engagement. Today, organizations are discarding terms like chief human resources officer with chief employee experience officer. With increasing competition and a tough business environment to operate in, organizations have realized the benefits of employee-centric strategies: higher revenues, lower costs, and stronger employee and customer loyalty. The question remains - why this and why now? Millennials are certainly a factor - They account for over a third of the US Labor Force with an equivalent proportion globally. What they seek most from their jobs is meaningful work, autonomy, connection, mentoring, and flexibility. To attract and retain these employees, companies are planning to provide more options to make hybrid work/life work for them: 66% said they plan to offer greater work flexibility, a family-friendly benefit that drives employee engagement. The pandemic has played its part - destroying the idea of a uniform work week, 9 am to 5 pm from Monday to Friday. More importantly, how people show up and interact with companies will differ fundamentally in the post-pandemic world of work. Organizations are recognizing they must reimagine every aspect of work - from recruitment and job evaluations to collaboration, perks, and the workplace itself. The pandemic has spun a new perspective, where the war for talent will be fought based on employee experience. So, what is employee experience? Is it a fad? The new buzzword? A fresh approach to competing in today's war for talent? Or a fancy way to make engagement sound better to millennials? We define this

trend of focusing on employee experience (EX) as companies and their people working together to create personalized, authentic experiences for employees that ignite passion and tap into purpose to strengthen individual, team, and organizational performance. Turning the support functions (such as information technology, finance, human resources, purchasing, and real estate) into excellent customer-service operations is a powerful lever to deliver a digital transformation focusing on employee experience. It promotes a longer-term impact and the full engagement of the staff by applying the principles of customer excellence to employees' journeys. Wipro's myUniHub is an integrated user engagement platform that provides employees with a consumer grade user interface to access resources and support. Coupled with industry leading technology such as ServiceNow, it offers a human-centric approach to simplify key employee journeys and transform those moments that truly matter in their day, year, and career. We borrow from great customer experience to consider how these moments provide unexpected delight to inspire employee loyalty and retention. The result is a virtual workplace which stages consumerized experiences enabled through harmonized omnichannel interfaces supported by smart automation and data insights. Abhinav Rajan S Practice Director - Digital Workplace Services, Cloud & Infrastructure Services, Wipro Abhinav has experience across Consulting, Business Development, Pre-sales, Solution Design and Software Development in Digital Workplace Services. As an experienced digital transformation professional, Abhinav has worked extensively with companies around the globe in providing innovative and cutting-edge solutions that focus on transforming employee experience. Abhinav keenly follows technologies that impact the future of work. www.wipro.com/blogs/v-r-krishnan/ ---- Blogs by Author Contact Wipro Please fill the required details to access the content V R Krishnan V R Krishnan Insurance, Digital Operations and Platforms, Wipro Limited Krishnan heads the Insurance practice of Wipro Digital Operations and Platforms. He has over 30 years of experience in leading global operations and sponsoring transformation initiatives for clients, including enhancing the digital footprint for Healthcare Payers, Providers, and Life and P&C Insurance companies. He is often roped in to help with new client operations setup and advisory services across the Americas, Europe, Asia, and Africa.

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## Launching Automation With Escape Velocity Using Design Thinking

---- Arcticle source ---- https://www.wipro.com/blogs/v-r-krishnan/launching-automation-with-escape-velocity-using-design-thinking/ ---- About the Authors Contact Wipro Please fill the required details to access the content Launching Automation With Escape Velocity Using Design Thinking May | 2021 If you have been responsible for automation projects in your organization in any capacity, you know that many projects fail. Why? There

are many surveys and studies, but we think that Bill Gates, the Founder of Microsoft, has summed it up quite well: "The first rule of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency. The second is that automation applied to an inefficient operation will magnify the inefficiency." In our experience, we have seen insurance clients apply automation to their business operations. An automation project has three distinct stages: Three Stage of automating a business process While automation projects are not exactly rocket science; however, they do share an interesting similarity. A successful mission has three stages—launch in which the rocket takes off, acceleration in which the rocket escapes the earth's gravity, and deployment in which the payload, say a spacecraft, is delivered into outer space. Similarly, an automation project has three stages. Each stage has its objectives and critical success factors, as shown in the table. Stage Objective

Critical Success Factors 1 Launch Opportunity assessment and 2 Acceleration Delivery of automation projects. prioritization. Deployment Adoption and industrialization of automation. Why use design thinking to identify automation opportunities? As we move from the launch to acceleration phase, the most important tollgate is go/no-go for the proposed automation project based on a business case that stakeholders believe in. However, a business case is not just a matter of crunching numbers. It is about the business and IT stakeholders sharing a common vision of who will benefit from the automation, why they will benefit from it, what needs to be built to provide the same, and how it should be tested and deployed. To do this effectively, we should adopt a useful, systematic approach, and that's where design thinking helps. In this article, we won't get into details of the design thinking approach, but will limit ourselves to outlining three key benefits: 1. A structured method for analysis based on real world inputs: a. Who? — The user, her persona, and her needs. b. Why? — Pains, gains, and insights. 2. Synthesis of ideas from multiple stakeholders a. What? — Pain relievers and creators across processes. b. How? — Prototype to test hypothesis and iterate. 3. Continuous improvement through an iterative process. How to apply design thinking across the insurance value chain? Now that we have considered advantages of using the design thinking approach, let's see how we can apply it to identify automation opportunities across the insurance value chain. The approach consists of five stages as shown in the figure (below). 4. transformation levers to shortlisted processes: We usually apply four types of transformation levers: a. Simplification - We consider lean and six sigma, shared services setup, and digitalization. An example of this would be centralizing the rating function. b. Automation - We consider workflow solutions, smart script, utilities, and RPA. An example of this would be bots managing digitized data. c. Intelligence - We consider data visualization, predictive and prescriptive analytics, and cognitive RPA. An example of this would be ensuring AI-based underwriting leakage reduction. d. Experience -We consider CX, mobile first strategy, and channel optimization. Providing a 360-degree customer view would be an apt example for this. 5. initiatives based on the overall impact and effort. Usually, considering two dimensions of the transformation effort vs. transformation impact can help us identify quick wins and strategic priorities. Applying the design thinking approach in the launch phase of an automation project will help in managing different stakeholders with ease. You will be ready to accelerate to the next

phase of implementation. Soumya Ranjan Dash Insurance, Digital Operations and Platforms, Wipro Limited Soumya leads the Insurance business unit of Wipro Digital Operations and Platforms. With a team of business consultants, process and automation experts, and operations, he is handling our clients across the Americas, Europe, Asia, and Africa. His strength lies in navigating Life & Pensions and Property & Casualty insurers during business process transformation, business change management, and digital operations using digital platforms. Soumya keys in 17 years of experience in management consulting, digital transformation, innovation, and operations within the global insurance and financial services sector. VR Krishnan Insurance, Digital Operations and Platforms, Wipro Limited Krishnan heads the Insurance practice of Wipro Digital Operations and Platforms. He has over 30 years of experience in leading global operations and sponsoring transformation initiatives for clients, including enhancing the digital footprint for Healthcare Payers, Providers, and Life and P&C Insurance companies. He is often roped in to help with new client operations setup and advisory services across the Americas, Europe, Asia, and Africa. www.wipro.com/blogs/shri-krishan-sharma/ ----- Blogs by Author Contact Wipro Please fill the required details to access the content Shri Krishan Sharma Enterprise Operations Transformation Advisory- APAC Geo lead Shri is an experienced professional in Enterprise Technology and Advisory domain. He has led multiple design-led technology engagement, comprising solutions with AI/ML, RPA, BPM workflow, Analytics, Cloud Infrastructure. Shri's expertise encompasses enterprise architecture, technology implementation and transformation engagements. He also leads initiatives around Melbourne Automation lab to drive rapid prototyping and innovative domain solutions. Shri has played pivotal role in solution designs at the intersection of business domain and technology.

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#### Combining Robotics Process Automation with complementary technologies - Intelligent Automation

---- Arcticle source ---- https://www.wipro.com/blogs/shri-krishan-sharma/combining-robotics-process-automation-with-complementary-technologies-intelligent-automation/ ---- About the Author Contact Wipro Please fill the required details to access the content Combining Robotics Process Automation with complementary technologies - Intelligent Automation May | 2021 The COVID-19 pandemic has expedited digital adoption across the globe. With an augmented need of digital workforce, organizations need to define their digital strategy to scale-up automation with tactical and strategic objectives. While scaling-up does not imply enhancing the digital workforce alone; it also entails a defined strategy to augment business operations with various facets of enterprise transformation such as

simplification, automation, intelligent automation, and immersive experience. Several industries have adopted a combination of rule-defined bot scripts (RPA) and advanced technologies like artificial intelligence to supplement productivity gains. Impact of intelligent automation on document extraction In this blog, we talk about document extraction. Organizations deal with a lot of unstructured/semi-structured documents on a daily basis. The staff assigned to work on business operations encounter a plethora of documentation as part of medical claims, invoices, purchase orders, goods receipts, evidence reports, and many other types of documents depending on the industry and organization. A significant amount of human time and effort is spent in going through each of these documents and segregating them, in order to gueue them with the right category and classification. Further to this, another piece of the puzzle is to extract the precise information and ingesting it to the respective downstream applications to achieve data and process sanity. While OCR has been a standard practice of extracting data from business documents; variations in templates have always remained a key constraint of this technology. For instance, there are tons of scanned invoices received by the business from vendors, but only 30% are in the same format and structure. This means that the data to be extracted resides at a similar document location with limited or no change in its definition. For all such invoices, rules are configurable in OCR and effective productivity and throughput is achieved. However, for high variability invoice scenarios; either it raises a lot of exceptions or the output is not that accurate. Intelligent automation can help synthesize large volumes of information and automate processes and operational workflows in an organization. Research indicates that nearly 80% of companies will adopt intelligent automation by 2025. Intelligent automation is an evolved answer to such scenarios to drive in enhanced productivity and seamless extraction of key data points by recognizing labels and values, and further applying review/ feedback learning to augment the efficiency. This aids in tackling variations and template complexities. Natural Language Processing (NLP) and machine learning further substantiate this process - enabling handling of customer sentiments, feedbacks, reviews etc. alongside template variations with significantly high confidence score. Is RPA an intelligent automation? The short answer is - no. RPA in its rudimentary form only mimics human action. It involves teaching a robot a script to follow hardcoded rules and logic. A bot is required to address all decisions and scenarios, and they are all pre-coded. Thus, prevails the question - How to make it intelligent and drive a solution that resonates decision making like humans, in the absence of a rule-based situation. This is where the amalgamation of complementary technologies like artificial intelligence and smart RPA operations comes into play. RPA can work as a data orchestrator that triggers key actions basis a set input mechanism like downloading attachment from emails, broker/ customer portals and saving them at a secured location. This, further triggers artificial intelligence/ machine learning modules to extract key information from document sources. Once the extraction is done, bot ingests the information to the respective downstream applications. While you might need custom scripting as part of setting up the platform for once, but this is still minimal. While the solution is imperative to drive operational gains and productivity, deployment with effective compliance, security controls, cloud policies, and data governance is critical considering any use case might involve customer

data. This is where the intersection of domain and technology drive through data security and controls, taking into account how these controls are unique to each organization and every business unit. Organizations deal with customer data and with the ecosystem of process, people and technology, data flow has multiple handoffs and touchpoints across multiple business units and applications. Accordingly, it's imperative for these digital platforms to establish requisite policies and compliance to encrypt data both at rest and in-transit. Further, onboarded platform partners/service providers should agree to comply and bound with your organization's data governance policies and protocols. Equally critical is the fact that data is accessed by right stakeholders with appropriate segregation of duties. Shri Krishan Sharma Enterprise Operations Transformation Advisory- APAC Geo lead Shri is an experienced professional in Enterprise Technology and Advisory domain. He has led multiple design-led technology engagement, comprising solutions with AI/ML, RPA, BPM workflow, Analytics, Cloud Infrastructure. Shri's expertise encompasses enterprise architecture, technology implementation and transformation engagements. He also leads initiatives around Melbourne Automation lab to drive rapid prototyping and innovative domain solutions. Shri has played pivotal role in solution designs at the intersection of business domain and technology.

## Modernizing the Core Banking System: Enabling the Future

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They recognize the importance of a seamless, personalized customer experience, leading them to embrace technologies like artificial intelligence and even to partner with competitors to enhance the value they deliver and their differentiation. The solution for this new era is multifaceted, but a key strategic element is to modernize the core banking system. Today's banking customers (particularly the millennial generation, an expanding market in terms of wealth) expect a lot. They expect their interactions with their banks to be seamless, frictionless, always on, and omnichannel. This style of interaction is more expected of upstart fintech companies and pure-digital banks, which benefit greatly from a lower cost structure and more contemporary information technology architectures using cloud, artificial intelligence, and advanced analytics. For banks that have been around for decades, the legacy systems that form their core banking platforms are illequipped to deliver the kind of customer experiences provided by newer arrivals in the financial-services marketplace. Legacy platforms are still getting the job done - handling high volumes of mission-critical operations very well - and many banks are understandably reluctant to change the status quo. Their systems hold critical data and are used 24/7/365. If not done well, modernization risks compromising the existing business capability offered by the legacy core system. But legacy platforms are challenging and expensive to maintain, in part because the technical skills required to maintain them are getting scarcer. Legacy platforms are not flexible enough to make banks agile, and they cannot handle a lot of the requirements for digital experiences. Moreover, legacy platforms are not designed for emergent regulatory initiatives like open banking. Still, modernization must take place, in some shape or form. This requires thoughtful strategic planning and execution to address five key challenges: The bottom line is clear: Banks need to overcome the challenges with legacy core systems to stay relevant. It is a difficult decision to replace core systems given the costs and the associated challenges to modifying the ecosystem. Banks with legacy systems have several choices when it comes to the modernization challenge: 1. Modernize legacy code. Legacy code is difficult to change (dated technology, poor documentation, and a lack technical skills specific to the legacy code). Plus, mission-critical processes run on core banking platforms, so care must be taken in handling legacy code. A developer may change the code without understanding the dependencies and that may lead to undesirable consequences. Banks running core banking applications built on mainframe technology are saddled with this legacy code. They get little or no support from vendors or OEMs and are mostly dependent on their in-house IT team. The knowledge is usually with the SMEs. Mostly, little or no updated documentation is available. Here's an example: A bank running a legacy teller application on a mainframe realized that the amount fields on the UI were stored in an encrypted format in the backend database. But the bank did not have the decryption logic and faced a significant challenge to migrate the data when it undertook a core banking transformation exercise. It might have been appropriate to rewrite or refactor that piece of code in the legacy application, which would help in the maintenance of the existing application. However, a proper analysis of the particular application is required to understand the implication of the change being taken, which is a challenge if there is no appropriate existing documentation available. Here are some of the legacy core banking application areas that could be considered for modernization: User interface (UI): UIs on mainframes can be considered for modernization without replacing the back end. Modern web technologies and cloud native architecture can be leveraged to replace the UI. Batch: Batch processing represents 70% to 80% of the workload on mainframes. Significant savings can be achieved by reengineering batch workloads. APIs: Consider exposing monolithic legacy code. Compatible integrators can be used to expose mainframe functionality as services via APIs. 2. "Big bang"

modernization. For some banks, a complete transformation program that replaces the legacy core with a modern core banking system is the best approach. Usually, the legacy estate is dotted with multiple applications and product processors handling different aspects of a business process. Depending on the size of the bank, the planning phase for this kind of modernization could last anywhere between three to 12 months, and the execution will require 18 to 36 months. It's critical to articulate interim deliverables, through minimum viable products or proofs of concept, to ensure that there no surprises at the user acceptance testing (UAT) stage. A big bang modernization requires thorough planning to ensure that all aspects are considered, including: 3. A progressive transformation. A phased, progressive approach is particularly helpful for large banks dealing with a legacy estate and numerous banking application catering to various business lines, capabilities, products, and processes. An example: A loan life cycle may require multiple applications for credit origination, disbursement, amendment, interest accrual, repayment, delinquency, and customer communication. When the legacy IT estate is complex, a progressive transformation helps ensure a better allocation of resources and budgets and a better outcome. A progressive transformation could entail: Extend the core using APIs (Application Program Interfaces) and microservices. Many banks have developed their core banking systems over many years, using built or bought source code, an approach that provided differentiation in the form of unique products or services. Some of the core systems are well engineered to handle large transaction volumes or numbers of users, offering horizontal and vertical scalability. Moreover, if banks in this category have not experienced any issues in their run operations, the investment in modernization is a difficult decision. These banks could consider extending their core system leveraging APIs/microservices to rationalize their core solution or offer digital solutions to their customers. Microservices allow non-core functionality to be moved a different layer. For example, a bank enhanced their core system to run credit checks on prospects, a processing load that occasionally damaged core system performance. Moving the credit check function to a microservices layer improved the performance of the core significantly. Expert Guidance Decisions to address the core banking system modernization are never going to be easy. But they should be done, and the effort begins with documenting the requirements and capabilities required to enable and support the future ambitions of the bank. It's essential to have a real understanding of the kinds of business a bank wants to handle - and the kind of customers a bank wants to serve. And it's essential to understand the relevant regulatory environment and (desired or mandated) open banking capabilities. The resulting vision of the future state of the business can guide the development of a target operating model and an IT architecture. With those ideas in mind, banks will be better equipped to think about, and choose, from the modernization approaches outlined above. Wipro has assembled a dedicated team to handle this kind of analysis and work: Core Processing Transformation (CPT), which focuses solely on helping banks evaluate core modernization options and provides an independent and impartial view of the choice of platform that serves the best interests of the bank. Learn more about Wipro and the Wipro Core Processing Transformation team by getting in touch with us. Industry: India's payment journey has changed significantly over time. What started as a barter system has evolved into

# Leadership imperatives for a smooth PMI journey: Cultural Integration & Change Management

----- Arcticle source ----- https://www.wipro.com/blogs/ajay-nahar/leadershipimperatives-for-a-smooth-pmi-journey-cultural-integration-and-changemanagement/ ---- About the Author Contact Wipro Please fill the required details to access the content Leadership imperatives for a smooth PMI journey: Cultural Integration & Change Management May | 2021 Leaders play a critical role in defining and nurturing the vision, mission, values and culture of an organization, which serves as its DNA and guides several generations of management. However, while undertaking an M&A deal, we often lose sight off from the cultural aspects, given intense pressure to deliver synergies and convince stakeholders that the deal is going to be accretive. It is high time to realize that an M&A deal is not just about integration of two legal entities. Moreover, generating synergies through Post-Merger Integration (PMI) process is not all about cross-selling products, consolidating overlapping business functions and rationalizing underlying IT infrastructure. In fact, it is much beyond marketing and financial levers as it involves integration of diverse teams consisting of people, who bring certain skills sets and behave according to their respective organization's culture. Hence, a PMI program can never run smoothly if people and cultural aspects are ignored. Another aspect of PMI which needs special attention is that it typically involves a whole lot of changes - operating model transformation, rejigging of the organizational structure, consolidation of some of the business functions, and so on. As leaders, we plan a bunch of changes but fail to effectively manage them, resulting in an unsustainable or sub-optimal PMI. To help you avoid such pitfalls, our recent report highlighted why organizational culture should be at the core of your PMI strategy and why change management is the most critical element of the PMI process. Let's take a deeper look. How can you

master the art of cultural integration? Here is a three-pronged approach to help you develop a seamlessly integrated culture in the combined organization and avoid potential cross-cultural conflicts impacting the performance of the people: 1. Assess the cultural compatibility of the combining entities: Assessing cultural compatibility does not mean just going through the vision and mission statements. You need to analyze the organizational structure, appraisal process, reward and recognition policies as well as subtle behaviors of the key leaders. Basis the inputs gathered from your research, try to categorize the respective cultures as per below competing values framework: Figure 1: Types of Organizational Culture: Competing Values Framework 1 In case there is a significant divergence between cultures of the combining entities, think again about your decision to pursue the M&A deal or review your PMI program to take a call on an appropriate degree of integration. For instance, assume an acquirer with "control" type of culture plans to completely integrate a target with "create" type of culture. In this case, target's people may find it difficult to perform at the same level as they used to as an independent organization. However, in the same deal, if acquirer integrates target to a small extent, retaining its original culture, its people will be able to perform better. 2. Define a desired state of the art culture: Refer to the best practices followed by leading players of the given industry. However, make sure that you preserve the cultural DNA of the combining entities. Also pay heed to diversity and inclusion as each person from different sections of the society brings value to the table. Now, clearly articulate and document key gaps between existing state and desired state of culture for each of the combining entities. 3. Identify cultural enablers to close the gaps: These enablers may have a broad scope - right from change in the organization structure, to change in the performance evaluation criteria, to enhancement of the reward and recognition policies. However, plan the identified cultural enablers with well-defined timelines, engage regional and functional leaders to launch them and closely monitor the progress. While using the above approach, make sure that you start cultural assessment right at the stage of due diligence, as a bad cultural fit may lead to a dismal failure of the deal. Also. allow desired deviations in the culture across different functions and business units, depending on their role and respective position in the value chain. How can you make PMI sustainable through effective change management? In some M&A deals, employees and customers start losing confidence in the leadership as they do not get clear and timely communication on the key takeaways of the deal. As a result, they start switching to competitors leading to serious financial as well as non-financial implications. To help you avoid such mistakes, below are five actionable tips which you can inculcate in your change management program. Figure 2: Key imperatives for a successful change management 1. Communicate transparently: Remember that people resist any change which comes to them as a surprise. Hence, develop a transparent and systematic communication plan to timely inform shareholders, customers, employees and third-party vendors the key changes planned in the PMI and how they are likely to impact them. 2. Engage with people right up to the grass-root level: Understand that people trust their immediate managers with whom they work closely. Hence, mobilize your business unit leaders and function leaders to be the exponents of key changes. These leaders need to engage. sensitize and prepare their team members to be ready for the planned

changes. Follow this process up to grass root level to engage people across the organization chart. 3. Assure zero disruption to customers and find new opportunities: Assess how the planned changes will impact different customer segments. Connect with key customers to assure that the new entity will serve them without any disruption in service or degradation of its quality. Start the transition process well in time, in case re-alignment of key account executives is on the plan. Moreover, start having conversations around additional capabilities and scale you will develop with the M&A deal and how can you leverage them to help your clients. 4. Design a robust talent retention program: List down the skills and competencies, which are a must to drive growth in your business. Also, record the key accounts, which contribute significantly to the business. Hence, identify people across business functions who manage these accounts and have expert level of proficiency in the critical skills. Assess propensity to leave of this talent pool and define segments based on their business unit, function, and rank in the organization structure. Finally, design a retention program for each segment with a fair mix of tangible and intangible benefits with well-defined vesting period. 5. Allow enough time to people to assimilate the change: Sudden changes are difficult to adapt, be it change in operating model, or change in role, or change in performance evaluation criteria. Hence, provide people enough time to adapt any change in their ways of working. Moreover, take a digital first approach to train them on next-generation business critical skills and enable them with technology-driven tools to better manage any additional responsibilities. Key considerations before you kick-off Before embarking on cultural integration and change management, make sure you contemplate on below check points: In case you are not prepared on any of the above consideration, you may appoint an external partner, ideally with strong expertise in conducting end-to-end PMI program in your industry. This may certainly help as seasoned consultants having worked with multiple clients bring strong experiential learning to the table. Lastly, to run a smooth and sustainable integration, always consider cultural integration and change management as the central elements of your PMI program. This will preserve the cultural DNA nurtured by the leaders and also drive growth to achieve the vision of the combined organization! References Ajay Nahar Ajay is a reputed knowledge leader with two decades of experience in market intelligence, business research and insights creation. Ajay has built knowledge capabilities across the globe and brings strong growth-driven leadership experience in the consulting, professional services, and technology space. Supported by: Pradeep Agarwal (Senior Manager - Wipro Insights) Agam Sehgal (Assistant Manager - Wipro Insights) www.wipro.com/blogs/ramachandran-ramu-padmanabhan/ ----- Blogs by Author Contact Wipro Please fill the required details to access the content Ramachandran (Ramu) Padmanabhan Ramachandran (Ramu) Padmanabhan Vice President, Cloud Applications Wipro Limited Ramu brings more than 24 years of industry experience driving innovative solutions for clients across industries. He and his team are responsible for driving the overall cloud transformation journeys of clients so they can achieve digital transformation for their enterprise. ==============

## How to Remove Technical Debt with Infrastructure and Application Modernization

----- Arcticle source ----- https://www.wipro.com/blogs/ramachandran-ramupadmanabhan/how-to-remove-technical-debt-with-infrastructure-andapplication-modernization/ ---- About the Author Contact Wipro Please fill the required details to access the content How to Remove Technical Debt with Infrastructure and Application Modernization May | 2021 As scores of enterprises embark on their digital transformation journey, an urgent need to modernize legacy infrastructure and application and improve the overall technical debt has emerged. Like a financial debt, technical debt incurs interest payments, which comes in the form of the extra effort that organizations need to invest in future development, because of the 'quick and dirty' design choice they sometimes end up making. At this crossroad, companies are faced with two choices: to continue paying the interest (i.e. spend more on future development cycles) or pay down the principal by refactoring the 'quick and dirty' design into a more functional design. How do Google cloud and Wipro, who are partners in application migration and modernization, confront technical debt? When it comes to a transition to cloud, they consider technical debt, cloud maturity, and migration patterns in the context of organizational benefit and time. They also factor in compelling events such as contractual imperatives (like Data Center managed services, Hardware renewal cycle, or lease renewal) and business risks associated with driving change in the various parts of the application/ infrastructure estate. Let's consider the example of a world class bank that was modernized with Wipro and Google cloud. The bank worked with legacy technologies with multiple EOL windows estate and unsupported software versions. This resulted in a rigid IT landscape with slow turnaround of services and a huge technical debt that impacted approvals from regulators. To simplify the bank's technology landscape, Wipro and Google cloud modernized all unsupported software versions to avoid EOL support, and moved them to opensource. They also established modernization patterns and drove full stack operations to optimize run cost. Clearing technical debt shouldn't be limited only to home grown applications, but include classic enterprise packaged applications, and associated workflows as well. How does an enterprise migrate their Windows workloads to cloud without sacrificing the sunk costs of MSFT licenses, or locking themselves in to pay the technical debt of running and supporting Windows? To resolve this issue, Google cloud offers its customers a unique program, the Microsoft Modernization Program, and provides them with GCP (Google Cloud Platform) credits for a portion of their Windows licenses. This provides customers with a path forward - to move to the cloud - while still incentivizing them to modernize their Microsoft Windows. More broadly, the Google cloud ecosystem lends itself to providing customers a path to move off - and thus pay off technical debt - for legacy Microsoft systems like MS SQL, Exchange, and Windows laptops. There are numerous instances where

the Google cloud program helped reduce technical debt for enterprises. Lush, a British cosmetics retailer, reduced hosting costs by 40% and migrated to cloud in 22 days. Colgate, a consumer products MNC, migrated 28,000 employees to Workspace in 6 months. Talking about packaged applications, Wipro itself is a great example to follow on how it reduced the technical debt related to their internal SAP estate by migrating their complex SAP landscape successfully to GCP leading to benefits like lower TCO (total cost of ownership), greater agility and speed by having the provision for new SAP system in minutes.and greater flexibility through multi-platform support. Technical debt is not only about clearing past debts, but also about minimizing present and future debt. Typical modernizations take an app centric view of the enterprise, which does not provide a comprehensive roadmap to minimize technical debt. Google cloud, on the other hand, follows a 'It's about Services, not applications' approach, where seamless DevOps skills and practices are pegged as the keys to success. Google cloud's Business Service Orientation process analyzes an enterprise's existing business service portfolio to identify and rectify the technology limitations that hinder the delivery of necessary services in an efficient and timely manner. During this process each service is evaluated on the following criteria: These criteria help them measure the performance of software delivery within a business, along with the capabilities that allow smooth delivery or the limitations that hinder it. Google cloud and Wipro's futuristic innovation program adopts a modern approach to minimize technical debt - both today and tomorrow. A testimony to that approach is the Metro Cloud competence hub which Wipro & Google Cloud developed along with their customer, Metro to accelerate digital transformation. The key driving elements of this initiative are: References Ramachandran (Ramu) Padmanabhan Vice President, Cloud Applications Wipro Limited Ramu brings more than 24 years of industry experience driving innovative solutions for clients across industries. He and his team are responsible for driving the overall cloud transformation journeys of clients so they can achieve digital transformation for their enterprise.

### Augmented Reality and Virtual Reality are Reinventing Retail

----- Arcticle source ----- https://www.wipro.com/blogs/anup-sukumar/ augmented-reality-and-virtual-reality-are-reinventing-retail/ ----- About the Author Contact Wipro Please fill the required details to access the content Augmented Reality and Virtual Reality are Reinventing Retail June | 2021

Globally, we see companies often introducing new technologies to help shape the landscape of their Retail and Consumer businesses. Such businesses are constantly working on adopting new age solutions and technologies that would enhance their customers' experiences. These preferred solutions and technologies work on: While most futuristic technologies and ideas are interesting and have their utility, many of them are still far from being practical. For example, let us look at a much-needed technology - 'Drone Delivery' - for this to succeed at a commercial level, huge investments from companies, customers and governments alike will be essential. It would also require a lot of support in the form of policy changes, new laws and technology adoption. This makes technologies like Drone Delivery much harder to implement guickly, on a larger scale. On the other hand, we also have technologies that are easy to adopt and implement within existing frameworks, platforms and protocols. 'Virtual Reality' and 'Augmented Reality' are the best examples of such technologies. The game changers: VR & AR Virtual Reality (VR) is all about creating an artificial digital environment, capable of providing a visual / sensory experience to the end consumer by replacing a particular space or situation (in our case, it would be the market place). VR helps improve customer experience by providing shopping comfort, more access, less effort, enhancing customer experience (CX) and optimizing physical presence. By closing in on the gap between physical and virtual presence, it creates a powerful immersive experience for the end user. Augmented Reality (draping digital content on the real-world) helps in enhancing CX in multiple other ways. A customer can enhance her/his experience in a store by getting more targeted and useful information on their smartphone cameras during the process of shopping. In today's context, nearly 20% of the consumer marketplace prefer making purchases on the internet (eCommerce and mCommerce). While online shopping delivers convenience and saves time and money, the biggest problem faced by a customer still is - what if the purchased item, on arrival, is not what was expected. An effective solution to this problem is Augmented Reality (AR) as it allows customers to virtually view and even try on products sold online. In other words, if you see the real world supplemented with digital objects, that's AR. Imagine you want to buy new curtains for your living room. Augmented reality technology will help you check how different curtains will look in your room and pick the one that fits best. AR can also take complaint management and technical support to the next level by providing both, the L2 support agent and the customer, an enhanced experience. The beauty of this technology lies in the fact that the agent and customer can visually see, show and operate on the 'problem' in real time. The fact that people can use their smartphones or tablets to run AR applications makes AR the most accessible reality technology with wide applications. The return on investments made from implementing AR-VR solutions are derived from the offset of costs achieved from not opening physical stores (being high on capital expenditure and overheads). AR-VR enabled marketplace To conclude, it is absolutely necessary for Retailers and CPG companies alike to adopt new age technologies that act as natural business continuity plans to physical stores, helps enhance customer experience, and reduces effort to increase sales. An AR-VR enabled marketplace also helps companies make analytics, targeted marketing and customer lifecycle management more robust, thus leading to increased revenues, improved margins and enhanced loyalty. There are plenty of

ways your enterprise can benefit from adopting new technologies like AR and VR. To know more about how Wipro can support your AR-VR journey, schedule a discussion with our experts. Anup Sukumar Practice & GTM Lead -Retail and Consumer Goods, Digital Operations & Platforms, Wipro Anup has 15 years of experience in Sales, Marketing, Business Development, Bid Management and Practice in the IT and ITeS space. He has developed successful GTM strategies and worked with organizations in Retail, Consumer Goods, Automotive, Consumer Electronics, Healthcare, and https://www.wipro.com/blogs/kishore-kanala/ ----- Blogs by Author Contact Wipro Please fill the required details to access the content Kishore Kanala Kishore Kanala Principal Architect, Wipro Kishore has over 2 decades of experience on various Linux based systems. He has helped customers in the development of Android and Linux based Smartphones, enterprise devices, IoT, automotive infotainment systems, and Smart TV. At Wipro, he is responsible for the Android and Linux platforms for these segments. Currently, Kishore is designing a virtualization automotive platform evolving Arcticle source ----- https://www.wipro.com/blogs/elvis-rodrigues/ -----Contact Wipro Blogs By Author Harmonizing and Automating GBS Performance Please fill the required details to access the content Elvis Rodrigues Elvis Rodrigues Vice President & Global Head - US Geo & BPaaS at Wipro Elvis Rodrigues is Vice President & Global Head - US Geo & BPaaS at Wipro. A seasoned executive and a recognized thought-leader in the IT Services industry, Elvis brings an exceptional track record of industryleading revenue growth, and improvement in profitability and market-share gains from across industries. His strengths lie in defining the strategy and business plan, P&L management, accelerating growth in new industry sectors, building global teams, large deal creation, and C-Suite relationships. Traditional shared services and single-function services are 

#### **Harmonizing and Automating GBS**

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As GBS organizations serve more than one business unit, the ultimate goal of business process management (BPM) is to improve efficiency and process control. But GBS relies on a standardized approach to governance, wherein a single global owner governs each process and the outcomes of activities are not tracked. Integrating functions and sharing technology on a global scale raises concerns over privacy, intellectual property ownership, regulations, and the difficulty of managing multiple software licenses. As a result, GBS teams find it cumbersome to manage processes end-to-end. Given the complex mix of processes, technology, and people, set across multiple geographies, the need of the hour for GBS organizations is an agile framework that is smart, adaptable and user-centric. Wipro's Harmony platform recognizes that today's GBS organizations and business users face increasingly complex, digital age business processes that are managed by outdated systems of process management tools and do not meet business requirements. The platform goes beyond a simple process management system by providing a holistic view of processes, comparative reports, and an intuitive platform for process automation. For instance, the Harmony platform begins the process management with a codified approach to the knowledge being captured. The layered approach helps in easing process design and creation by setting up real-time alerts for enforcing a responsible, accountable, consulted, and informed (RACI) matrix. A centrally catalogued library provides structured process storage for on-demand retrieval and reuse, providing single truth to all stakeholders. The biggest benefit of the platform comes with its automation solution. Harmony provides a simplified automation identification system encompassing various phases of the process life cycle-capture, assess, design, deploy, and maintain. The system accounts for process variance and identifies opportunities for data, role, and system simplification. Traditionally, process comparison would take several days requiring experienced employees to connect with SMEs to recommend processes. With Harmony's automated harmonization functionality, business users are provided process harmonization recommendation based on a multi-factor assessment for bestin-class activity. Users can now perform a side-by-side comparison of processes and internally benchmark them. The second layer of automation is the addition of BOTMAP - an intelligent algorithm that identifies processes most conducive for automation. With BOTMAP a standard for assessing automation is established that saves time and cost of an organization. To adapt to the next wave of digital GBS organizations, a harmonized process management approach is required. Wipro's Harmony platform empowers GBS organizations with greater agility and a stronger knowledge and process management capability. With the development of global operating models, in conjunction with evolving process models, the smart harmonization of business functions, advanced gap analysis, and automated process health identification translate into better decision making for business users. Industry: Elvis Rodrigues Vice President & Global Head -US Geo & BPaaS at Wipro. A seasoned executive and a recognized thoughtleader in the IT Services industry, Elvis brings an exceptional track record of industry-leading revenue growth, and improvement in profitability and market-share gains from across industries. His strengths lie in defining the strategy and business plan, P&L management, accelerating growth in new industry sectors, building global teams, large deal creation, and C-Suite relationships. Despite the long-standing history of private pension plans,

superannuation was introduced to Australians over 20 years ago to help them support their retirement in a financially viable way. Fast forward to 2020; it is now a A\$3T business. Over the last two decades, superannuation has become complex, highly regulated, and vulnerable to scandals. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just neglected culture.

www.wipro.com/blogs/leon-cosgrove/ ---- Contact Wipro Blogs By Author AI and Automation is not a One-Stop Shop Please fill the required details to access the content Leon Cosgrove Leon Cosgrove Partner - Domain & Digital - Mining / O&G Wipro Limited Leon has over 30 years of overall IT industry experience, with over 20 years in the mining domain. He has a welldeveloped understanding of the end-to-end value chain business processes in mining, especially in resource definition, mineral resource management, resource extraction, processing, asset maintenance and reliability, logistics, sales and marketing. Leon also has experience in electronic payment (clearing/settlement, financial management, CRM, card and device management), and in the construction/manufacturing industry. He is helping Wipro Ltd. achieve its vision of becoming the market leader in digital mining by expanding into global markets for the mining industry. Mining companies are taking an increasing interest in adding components of AI and Automation into their digital landscape to cover a host of uses cases from document investigation on geological surveys, environmental impact studies, and complex reports and documents on safety and assets using natural language processing (NLP), as well as processing of old paper-based mapping and drill logs into digital formats to exploration targeting, for regional areas and local within the existing mining.

#### AI and Automation is not a

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and Automation direction need to be aware of the fact that it is a complex landscape with many offerings in each functional area, with multiple vendors from the Big 4 to ISV to startups. Also, there needs to be awareness about the gaps in what AI/Automation solution vendors are providing, when starting to develop their systems. This has been the experience that companies that have embarked on this journey have found with clients when developing solutions with other AI & Automation platforms from AWS, Microsoft and Google. What is needed to handle this situation is the AI & Automation ecosystem. Customers are looking for a single source of truth and governance for managing all type of AI/Automations. Customers are seeking out AI vendors to work together and bring combined AI capabilities to quickly fill the gaps and rapidly develop solutions. System Integrators who can accelerate time to value with AI, with pre-baked industry solutions and BOTs, provide professional services skills in IBM, AWS, MS, Google, their own AI platform and Open-source, as well as provide technology training for the customers' own staff into AI skills. Also, there is a growing need to gain access to crowdsourcing development capability like Freelander, Topcoder, UnEarthed etc. to bring capability on demand in AI and Advanced Analytics when needed. Vendors that have collaborated on AI projects include Wipro, with its Holmes platform and IBM Watson for clients to deliver Holmes on Watson or Holmes + Watson solutions. One of these was where Wipro Holmes & IBM Watson collaborated to improve workplace productivity for a leading Australian oil & gas major. Another was a Natural Language Query (NLQ) for Enterprise for PetroTechnical Staff (Geoscientist) for Upstream, where Watson was used for language understanding tasks and Holmes for image intelligence, and the improvement in searching through structured and unstructured data went from 30 minutes to 2 minutes. Going forward, the IT landscape in AI and Automation is not going to be a one-stop shop and customer IT organizations need to be aware of this complexity and look for organizations which are able to work together and have the platforms to manage the complex AI/Automation environment. Industry: Leon Cosgrove Partner - Domain & Digital - Mining / O&G Wipro Limited Leon has over 30 years of overall IT industry experience, with over 20 years in the mining domain. He has a well-developed understanding of the end-toend value chain business processes in mining, especially in resource definition, mineral resource management, resource extraction, processing, asset maintenance and reliability, logistics, sales and marketing. Leon also has experience in electronic payment (clearing/settlement, financial management, CRM, card and device management), and in the construction/ manufacturing industry. He is helping Wipro Ltd. achieve its vision of becoming the market leader in digital mining by expanding into global markets for the mining industry. The widespread work-from-home trend caused by the Covid-19 crisis contributed This has led to an upsurge in capital investments and a greater need for effective technology planning strategies as enterprises replace legacy platforms with new platforms. www.wipro.com/blogs/abdemanaf-rangwala/ ---- Contact Wipro Blogs By Author Security token offerings: Will it be a game changer for the capital market? Security Token Offerings: What does it offer? Please fill the required details to access the content Abdemanaf Rangwala Abdemanaf Rangwala Principal Consultant, Securities and Capital Markets, Wipro

Abdemanaf brings in 17 years of Domain Consulting experience covering

investment banking and investment management space in UK and US. He has been on advisory roles covering Business Analysis, Process Analysis, Data Analysis and Machine Learning programs. Currently, he is focused on Securities Token, Blockchain and can be reached at Abdemanaf.rangwala@wipro.com The Global Capital markets is still recovering from the 2008 crisis; the regulatory burden has sapped the energy out of capital markets. In US alone, Wall Street is seen as the quagmire for gambling and loss by political pundits, however significantly, capital markets fund 65% of the US economy therefore the dependency on capital markets as whole is something that cannot be ignored ICO's (Initial Coin offering) was introduced in the market with huge aplomb. The sole purpose being the issuance of digital coins that would streamline the exchange process and reduce costs considerably. However, over time, scams and hacks has taken over the news and with that taken away the 'trust' factor. Interestingly, the Top 10 biggest ICO scams managed to fraud with \$ 687.4 million (Source: Finance Monthly) which is 50% of the GDP of Seychelles and Gambia =============

# Security token offerings: Will it be a game changer for the capital market?

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settlement systems will go away. b. Speed All the supplementary support services like reconciliation will be a thing of the past. The reporting aspect maybe built in smart contracts to generate client/transaction reports on a real time basis. Due to regulatory requirements still in flux, there is a deep reluctance in the role of market players like custodians, broker dealers. However, the basic tenets of holding and protecting customer's assets (in this case STOs) is not going to be lost. Recent alliance between Coinbase Custody and TokenSoft Global Markets3(acting as a Broker - dealer) has led to a strong foundation institutional grade security, financial controls and auditability. Transfer Agents will have a limited role to play as the need to store dividend or corporate actions items and other reporting needs could easily be embedded in smart contracts. Recordkeeping will be a challenge as the fund accounting aspect will remain significant in STO environment. The integration with fund accounting systems is to be explored and how that will impact global updates on real time/batch basis. Due to efficiency in clearing and settlement operations, the depository services and maintaining counterparty risk will go away. This will reduce investments in resources increasing efficiency and profitability many folds. Key Bottlenecks Conclusion It is significant to note that South Korea's leading Blockchain research centers - Coinone Research Center and Chain Partners CP Research have determined that STOs will be a huge success in crypto industry with STO market estimated to grow to \$2 trillion dollars by 20304. However, one needs to bear in mind that too much regulation would hamper the progress and create hurdles, and too less regulations will give away trust in digital coins with no return in future. Therefore, SEC needs to work on a robust guideline that will promote STO business with minimal risk for the investors at large. From an IT transformation standpoint, the opportunity is infinite. Banks' technology landscape will require a relook with focus on more automation and digitizing of data management. There will be a need to build interfaces to pull data using STO protocols. This will require niche skillsets. 2019 and beyond looks more exciting for STOs as banks and other ancillary firms study the impact on its business and technology. Here are the immediate opinion on trends for the next 3 years: The best is yet to come! References 1. www.sifma.org - SIFMA 2018 Outlook: Trends in the Capital Markets 2. https:// www.financemagnates.com/cryptocurrency/news/tokensoft-broker-dealertaps-coinbase-custody-service/ 3. www.financemagnates.com 4. http:// www.altnews.nu/latest-research-from-south-korea-suggests-that-2019-couldbe-the-year-of-stos/ 5. https://cryptonews.com/news/what-could-save-assetmanagers-usd-2-7bn-a-vear-blockchain-1263.htm Industry: Abdemanaf Rangwala Principal Consultant, Securities and Capital Markets, Wipro Abdemanaf brings in 17 years of Domain Consulting experience covering investment banking and investment management space in UK and US. He has been on advisory roles covering Business Analysis, Process Analysis, Data Analysis and Machine Learning programs. Currently, he is focused on Securities Token, Blockchain and can be reached at Abdemanaf.rangwala@wipro.com Online purchases are on the rise, and with them, so are fraud and disputed payments. When we look back at the COVID-19 pandemic of 2020, we will see not just the human and economic loss inflicted by the virus, but an important gain - a growing global 

#### **Security Token Offerings:**

#### What does it offer?

----- Arcticle source ----- https://www.wipro.com/blogs/abdemanaf-rangwala/ security-token-offerings-what-does-it-offer/ ---- About The Author Contact Wipro Related Blogs Re-Imagining Dispute Management with an Integrated Digital Strategy Why 2020 Will See the Birth of the 'Trust Economy' The New Private Equity: Creating Value Quickly and Reliably Through Digital Transformation Please fill the required details to access the content Security Token Offerings: What does it offer? April | 2019 This is the first of a twopart article series on security token offerings. The first part elaborates the benefits blockchain-based financial securities bring to the table. It also looks at its pitfalls. The second part dives into the impact of these tokenized securities on capital markets and the hurdles blocking its rise. Initial Coin Offerings (ICOs) were introduced in the market with huge aplomb. The sole purpose of the offering was to issue digital coins that could streamline the stock trading process and reduce operational costs considerably. However, over time, scams and hacks have overshadowed the euphoria and taken away the 'trust' factor. Interestingly, the top 10 biggest ICO scams managed a fraud of \$ 687.4 million1 which is 50% of the GDP of Seychelles and Gambia. Research from Satis Group claimed that 80% of all ICOs in 2017 were fraudulent scams2. With the danger of ICOs going into oblivion, Securities Exchange Commission (SEC) is streamlining the industry and is studying the ICO markets to recommend more regulations. New securities in the form of Security Token Offerings (STO) were born! STOs are a regulated version of digital tokens. This is a revised version wherein the tokens are backed by physical assets like derivatives, stocks, and bonds. Latest research from South Korea indicates that STOs will dominate 20193. So are STOs the next big thig? Let's understand these securities. Benefits of Security Tokens Regulatory requirement US regulatory body SEC identifies STOs as security, therefore STOs come under the strict purview of all security investments. Any issuance of security tokens will be treated as per the IPO norms falling under Reg D, Rule 506 and Reg A, Reg S. Currently, SEC is still weighing options and studying to come up with supplementary guidelines to make the STO market foolproof with no ICO scam /hack repeat. This will ensure that security tokens are issued with the intent of mobilizing funds and protects the investors at large. Fractional ownership Security tokens can be used as a medium to mobilize funds on items requiring huge investments. For instance, art collectibles that cost millions of dollars are limited to affluent investors only. With security tokens, the art collectible value can be broken into fractions, which can then be issued to investors reaching wider base. The appreciation of the value of the art collectibles would in turn accrue the security token investors. Similar concept is now extended to the real estate world where the REITs (Real Estate Investment Trust) could be issued as a security token. In fact, real estate market is already embracing the STO uprising. As per latest reports, the world's real estate value reached \$280.6 trillion dollars, which gives a broad indication

of the scope we are dealing with 4. However, there is a need to work on semantics such as breaking the value into fractional ownership. Will the ownership value change based on market value appreciation or depreciation? Will this be based on some weighted average format? This will require more clarity as we move along. Cost advantage The issuance of security tokens is targeted to remove middlemen and provide simplicity to investors. Chainium, a crowdfund based platform, was developed with the sole purpose of connecting investors to investors and avoid middlemen. This will provide more scope to corporates to seek public investments and thereby increase more accountability and transparency in the long run. Increase in liquidity Security tokens offer more liquidity in terms of ease in buying or selling in a market or underlying asset not available or complex to buy or sell. Liquidity is determined from two perspectives - Market and Fund. Market liquidity is transactional liquidity and fund liquidity is the ease for acquiring credit with less transaction or assessment costs. Security token offerings are a win-win situation from an overall liquidity point of view. Venture capitalists can now expect huge returns as they mitigate the initial challenge of offering illiquid assets that takes its lifecycle to convert into liquid assets, thereby investing more time and resources. With the benefits more prominent, how does one deal with the pitfalls. Pitfalls of Security Tokens Lack of wider acceptability ICOs earned a bad reputation as it caused huge disappointment to many investors who banked on Bitcoin and blockchain and then realized that the value was overpriced or the offering was a scam. Due to ICOs' bad reputation in the market, the STOs will need time to attain trust. Also, how can one deal with insider trading and market manipulation which remains extended to STOs too? STOs need major financial institutions to vouch for it: this will increase acceptability amongst its peers and their clients. This may take some time even with the protection of regulatory requirements. The need of the hour is to introduce regulatory requirements which will act as a good first line of defense and protect the investors at large. Although security token offerings are introduced as a 'badge of honor' from regulatory authorities, the investors will need more education to build their trust and start investing in STOs. Integration of systems How will the internal systems of banks integrate with smart contracts written in programming code? This is not a traditional paper based business process. This will require building protocols/interface to pull data, and write and maintain in the existing system architecture. This may require specific skillsets and will duly increase costs, both in terms of human resources and enhancing the systems to interface with STO specific blockchain technologies (e.g. smart contracts). Talent Finding a right fit to maintain security tokens will not be easy. For instance, getting a blockchain expert based in Silicon Valley to work for banks will be a challenge in itself. This may increase initial acquisition costs but this will spread out in the long run. In part two, we delve into the future of STOs and its impact on the capital market. Access part two of the series here. References 1. www.finance-monthly.com 2. https://news.bitcoin.com/80-of-icos-are-scamsonly-8-reach-an-exchange/ 3. https://www.coinspeaker.com/latest-researchfrom-south-korea-suggests-that-2019-could-be-the-year-of-stos 4. https:// www.forbes.com/sites/forbesrealestatecouncil/2018/10/12/the-future-of-realestate-investing-a-new-global-asset-class-emerges/#5f5a3c95363b Industry: Abdemanaf Rangwala Principal Consultant, Securities and Capital Markets, Wipro Abdemanaf brings in 17 years of Domain Consulting experience

covering investment banking and investment management space in UK and US. He has been on advisory roles covering Business Analysis, Process Analysis, Data Analysis and Machine Learning programs. Currently, he is focused on Securities Token, Blockchain and can be reached at Abdemanaf.rangwala@wipro.com Online purchases are on the rise, and with them, so are fraud and disputed payments. When we look back at the COVID-19 pandemic of 2020, we will see not just the human and economic loss inflicted by the virus, but an important gain - a growing global Arcticle source ---- https://www.wipro.com/blogs/rahul-bansal/ ---- Contact Wipro Blogs By Author What Should You Do To Adopt Service Monetization? Please fill the required details to access the content Rahul Bansal Rahul Bansal Director - Digital, Technology BU, Wipro Ltd As part of his role, Rahul works with clients to solve their business problems harnessing technology. He is a tech enthusiast and loves playing chess and tennis in his free time. Rahul graduated from REC Jamshedpur. To answer the customer's question, "How do I get from point A to point B at a reasonable cost?" ==============

#### What Should You Do To Adopt

----- Arcticle source ----- https://www.wipro.com/blogs/rahul-bansal/whatshould-vou-do-to-adopt-service-monetization/ ---- About The Authors Contact Wipro Related Blogs The Metaverse Has Arrived, and Its Implications Will Shape Our Not-Too-Distant Future How to Transform from Problem Solving to Customer Success 3 ways Servitization can change the game for high tech players Please fill the required details to access the content What Should You Do To Adopt Service Monetization? April | 2019 To answer the customer's question, "How do I get from point A to point B at a reasonable cost?" Uber's answer was not to launch a cheaper taxi service but to provide a marketplace to connect service providers with customers. In other words, customer-centricity is at the heart of Uber's business model. There was a time when delivering the best product for the best price was enough to keep any firm ahead of the competition, but with globalization pushing product prices down, and products being commoditized, companies are turning to services to gain that critical competitive advantage. A number of firms that are seeing success, have made a transition from being product-centric to solution-centric organizations. Service monetization is a business model that provides solutions to customer needs and in turn, empowers the company with the ability to monetize its products and services. As a result, customer engagement increases as we move from product to outcome-related services. Increased customer engagement provides more opportunities for the service provider to understand customer needs and serve those needs (cross-sell and upsell) to strengthen the relationship further. We see three types of service monetization journeys for organizations, depending on where they are in the adaption process. While several companies are already well ahead in their journey to offer their products as services, there are many others who are currently exploring ways to monetize better, and others who have few uses but are thinking of expanding. Each company has a different challenge and approach as they move further on their journey -

ranging from defining the use case, to customer adaption, to continually improving the customer lifetime value (See Figure 1). Figure 1: Journey to service monetization The Essentials for Service Monetization Service monetization involves significant and sensitive change management during transition from product-centric/perpetual license business to service-centric business. The change needs to be managed carefully with proactive communication on what changes are coming, what needs to be done, and how will it impact people. Firms will need to change their mindset. Product/ perpetual licensure drives capital development upfront and on time, whereas services make money over time. Firms, at times, find this difficult to reconcile and often do not see the expected profits when first deploying service monetization. In order to achieve profitability, firms need to understand the financial implications of the new business model and its effect on firm performance. Traditional business processes and Key Performance Indicators are radically different from the capabilities required to support service monetization. Companies need to radically transform multiple aspects of their business, from defining success criteria to people to business metrics and of course, their products and overall quote-to-cash process. Here are some key process and technology changes required to support service monetization: Financial case management service monetization begins with uncovering the customer's unmet needs and knowing how to provide a wonderful experience in meeting them. Service monetization is not easy and firms need strong leadership and help from experts to define the roadmap, and enable technology and change management. In the end, service monetization pays off due to value creation. Industry: Rahul Bansal Director - Digital, Technology BU, Wipro Ltd As part of his role, Rahul works with clients to solve their business problems harnessing technology. He is a tech enthusiast and loves playing chess and tennis in his free time. Rahul graduated from REC Jamshedpur. Arun Trivedi Digital Partner - Technology BU, Wipro Ltd Arun specializes in defining IT-enabled business transformation roadmaps, service monetization, quote-to-cash business processes, and revenue recognition for clients. He has been involved in helping clients, from defining their business challenges to leveraging technologies to resolve business problems and enabling benefits realization. The metaverse is here and with its fully immersive and augmented virtual experiences far superior to anything we have witnessed before, the boundaries between our physical and digital worlds may gradually collapse for good. For many decades, the mission of tech support has been helping customers deal with a variety of issues covering the typical lifecycle of a software product. Support has been an essential part of selling and servicing software throughout the history of commercial computing. Subscribing to products as a service helps customers get more bang for www.wipro.com/blogs/constance-fourguet-mittal/ ----- Contact Wipro Blogs By Author Enterprise tech: How to achieve results as a go-to-market partner for start-ups? Please fill the required details to access the content Constance Fourguet-Mittal Constance Fourguet-Mittal Open Innovation team, CTO Office, Wipro Constance is currently working with the Open Innovation team within the CTO Office and is part of the Global 100 leadership program at Wipro. She recently graduated from her MBA at London Business School. She has experience in finance and strategy and has worked with both large corporates and start-ups in many different countries. While traditionally,

# Enterprise tech: How to achieve results as a go-to-market partner for start-ups?

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their offerings and providing services on top of the software or product developed by partners. This provides them an edge in terms of their ability to offer differentiation to their customers, and since the service providers do not always need to build capabilities in-house, they can accelerate their time to market. Benefits of Channel Partnership Challenges in making partnerships work There are definite distinctions in the way large corporations and start-ups operate; leading to a mismatch in expectations on the two sides as both partners work out the practicalities of a partnership. The first challenge that start-ups generally encounter in a partnership is the size and scale of a partner organization. Navigating the organizational structure, identifying the right stakeholders that would take the product to market and determining relevant use cases require patience and persistence. It is all the more true that the first success in this type of partnership would typically take a long time and contrasts with the fastpaced environment start-ups are usually used to. For example, while dealing with large accounts, we have observed cases in which their interest levels dip over time due to other priorities, leading to poor traction and lost momentum. Secondly, start-ups expect more face time with customers than channel partners are sometimes able to offer, as it is often the quickest and most impactful way to demonstrate their value. No one else can articulate a start-up's value proposition better than a founder. Indeed, approaching this process in a sequential manner in which the service provider first sources requirements from its customers and subsequently involves start-ups if they can help address these requirements, exposes the service provider to information loss and misunderstandings and slows down the entire process. The limited exposure creates ambiguity on the start-up side as they are not able to understand the real needs or intent of the customer with respect to the bigger picture. Lastly, another challenge, which is also fairly typical in large organizations, is the time it takes to go through the internal processes and necessary approvals for administrative, procurement and legal formalities, including partnership agreements, purchase orders, contracts, incentive structure etc. How we work towards solving them? In our experience, having a dedicated innovation team that can navigate the organizational structure and build a breadth of connections with business units and delivery teams is crucial to the success of the relationship between service providers and start-ups. The ability of this team to influence multiple internal stakeholders that can then evangelize start-ups' solutions on their own is very important to drive a given partnership forward and eventually achieve scale. In order to do so, we have structured our team with Alliance Managers that can anchor relationships with specific start-up partners, incubate the partnerships and guide them along the entire journey as they are able to understand both the start-ups' perspectives and corporate needs. Setting up regular touchpoints with all the relevant stakeholders has also proven to be particularly helpful for maintaining partnership momentum. Last, but not the least, we measure ourselves on outcomes for start-ups and not solely on internal successes. In addition, one of our key partnership drivers is the Start-up Exchange program (StartEx). The idea is to put startups directly in front of our customers and altogether look for opportunities to co-innovate. We strongly believe that this is a critical step in establishing successful partnerships between us, our customers and the start-ups. Therefore, we have been proactively looking for opportunities to work in a tight-knit circle involving all parties simultaneously. Having a start-up

founder pitch his/her solution to senior leaders of Fortune 1000 companies with our support in the room creates an impact and is the best way to demonstrate commitment and mutual trust. It is also a fantastic opportunity to understand our customers' problems from the discussions that follow. In some cases, it has taken only about four to six weeks from the initial StartEx to a paid Proof of Concept (PoC) run within the customer's IT environment, drastically accelerating a process that can sometimes drag on for months. We even recently completed a paid PoC with a start-up partner for a prospective customer, a clothing retailer, off the back of a StartEx curated for this client's visit few weeks prior. Start-up Exchange program Finally, we are constantly working towards simplifying procurement, legal and administrative processes for start-ups. We have standard mutual Non-Disclosure Agreements (NDA) and partnership agreement templates that can be used as soon as in-depth discussions start. Dedicated support staff is available within procurement and legal teams to address issues, if any. We have also recently started working on building an enterprise grade Cloud collaboration platform that will act as a self-service marketplace and enable seamless collaboration between start-ups, internal stakeholders and our extended ecosystem of partners and customers. Overall, even though we are still early on in our channel partner journey for early and mid-stage enterprise tech start-ups, we always look to maintain a feedback loop with our partners in order to learn from our mistakes and to improve. To date, we have built partnerships with 50+ enterprise tech start-ups through our Open Innovation initiative and have invested in 14 other start-ups through Wipro Ventures, our strategic investment arm. Our partners are typically early to mid-stage who are looking to accelerate their scaling process. For more information on how start-ups and corporates can collaborate successfully, check out our report Open Innovation for the new world of tomorrow. Industry: Constance Fourguet-Mittal Constance is currently working with the Open Innovation team within the CTO Office and is part of the Global 100 leadership program at Wipro. She recently graduated from her MBA at London Business School. She has experience in finance and strategy and has worked with both large corporates and start-ups in many different countries. Ramanan Sambukumar Ramanan is the head of the Open Innovation team within the CTO Office at Wipro and is also part of Wipro Ventures. He has a successful track record in making innovation work for enterprises. He has more than 16 years of consulting and industry experience working across different phases of business, from start-up to turnaround, with end-to-end responsibilities from customer acquisition, pre-sales, delivery/competency to P&L. To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. Salesforce offers an incredible range of functionalities, making it difficult to find.... A report from Forrester predicts up to 20% of Fortune 500 companies will not make it through 2021 intact. "[For] some, their assets will be dissolved or purchased; others will just go out of business." One possible cause of this is a lack of strategy when investing in and utilizing technology. "The pandemic revealed the flaws in many companies' technology...and their tech leaders were found mired in Band-Aids like tech modernization, Arcticle source ---- https://www.wipro.com/blogs/waqas-khan/ ---- Contact Wipro Blogs By Author Securely and confidently embracing Apple devices in the Workplace Please fill the required details to access the content Wagas

Khan Waqas Khan System Engineer and Solutions Architect Waqas Khan is a System Engineer and Solutions Architect, specializing in integrating Apple devices in large multi-national corporations. He's a member of Apple's Consultant Network and various other Apple-centric forums. He loves playing tennis and watching DC comics animated movies. Across organizations of all sizes, a considerable number of end-users are now preferring a Mac over a PC, when given a choice.

### Securely and confidently embracing

#### Apple devices in the Workplace

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examine the nature of non-compliance (password being too short, device lacking disk encryption, etc.) and fix it with a single click. In the event that a user or a device is prevented from accessing the data, the system moves the user or device to a self-service app designed to analyze and fix security issues. Using this app, it is possible to identify the reasons for noncompliance and fix those issues in order to restore access to the data. The device can be made compliant with security standards without IT intervention. The integrated solution can be applied across industries and organizations regardless of their size. These organizations could have 10 users or 100,000 users, they could be national or global—it all boils down to the need for security. It is guite evident that the number of employees preferring to use Apple devices in the workplace is growing and will very likely continue to grow in the near future. This will in turn require organizations to ensure that the Apple devices meet their security standards. The Jamf Pro and Intune integration will play a key role in achieving this goal. [i] https://appleinsider.com/articles/18/10/23/sap-turnsto-jamf-to-manage-its-fleet-of-macs-ios-devices-and-apple-tvs Industry: Wagas Khan System Engineer and Solutions Architect Wagas Khan is a System Engineer and Solutions Architect, specializing in integrating Apple devices in large multi-national corporations. He's a member of Apple's Consultant Network and various other Apple-centric forums. He loves playing tennis and watching DC comics animated movies. To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. Salesforce offers an incredible range of functionalities, making it difficult to find.... A report from Forrester predicts up to 20% of Fortune 500 companies will not make it through 2021 intact. "[For] some, their assets will be dissolved or purchased; others will just go out of business." One possible cause of this is a lack of strategy when investing in and utilizing technology. "The pandemic revealed the flaws in many companies' technology...and their tech leaders were found mired in Band-Aids like tech modernization, simplification, and consolidation." www.wipro.com/blogs/abhishek-mukherjee/ ---- Contact Wipro Blogs By Author Why insurers need to adopt DevOps for faster digital transformation How to make insurance relevant to millennials Please fill the required details to access the content Abhishek Mukherjee Abhishek Mukherjee Digital Practice Head for Insurance Vertical, Wipro Abhishek has around 17 years of experience with a strong vertical alignment to Insurance. In the field of insurance, he holds professional certifications like LOMA, AINS and has over 10 years of hands-on experience in Strategy & Offerings, Business Process Re-engineering, Marketing & Business Development, Product Development, and Consulting functions. The global insurance industry has embarked on a journey to go digital. The business of insurance, ever since its inception centuries back, has flourished globally. Though customer demographics had been evolving year by year, it did has not guite impact affected the perception of Insurance insurance to the global citizen for many decades together, until the millennials came in.

#### Why insurers need to adopt DevOps for faster digital transformation

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extensive data warehousing projects, SOA/BPM Implementations etc. Many struggled with high levels of effort, yet failed implementations with serious risk and cost implications, and therefore developed a certain reservation for IT innovation. When the tides started turning, thanks to InsurTech, the prospect of value based IT implementations were revisited. From long drawn implementations, the focus shifted to building relatively lightweight solutions with much shorter implementation cycles and even quicker pilots. Technologies such as Robotic Process Automation, Chatbots, Conversational AI, Machine Learning, Computer Vision, IoT and Cloud, etc. opened doors for frequent technical experiments with the zeal to quickly build working prototypes that would complement the core systems and fetch a faster ROI. While the nature of solutions that are envisaged today is changing - it is equally important that the basic foundation of development of these kind of IT assets and delivery of new digital services does not form a bottleneck to the whole innovation paradigm. This is precisely where DevOps brings value to the insurance industry that needs speed and agility today. Insurers realize that the biggest business problem is the lost opportunity for not executing business service delivery with enough quality and speed compared to the competition. DevOps is essential to being able to deliver digital services at speed and with quality, thereby making it a foundational element of successful digital transformation. Interestingly, multiple factors are jointly contributing to the growing appetite for DevOps. While the end customers are becoming more 'digitally engaged', cloud space, especially the platformas-a-service offerings are maturing fast. Carriers have the right opportunity today to take advantage of this scenario to effectively provision newer digital assets and seamlessly keep delivering the experience to their customers. In the process, they are also achieving business stability, often eliminating necessary evils like downtime due to new features rollout. Further to DevOps, another interesting advancement is DevSecOPs, which brings in the concept of security conformance earlier in the lifecycle of application development, thereby minimizing vulnerabilities better than before. By embedding security in each phase of the development process, organizations can accelerate the launch of robust business applications. Security functions like identity and access management, firewalling, and vulnerability scanning are some of the relatively easier picks that can be considered to start with. DevOps and DevSecOps together have the potential to give a solid head-start to future IT development and innovation endeavors that will benefit the insurance industry. Industry: Abhishek Mukherjee Digital Practice Head for Insurance Vertical, Wipro. Abhishek has around 17 years of experience with a strong vertical alignment to Insurance. In the field of insurance, he holds professional certifications like LOMA, AINS and has over 10 years of hands-on experience in Strategy & Offerings, Business Process Re-engineering, Marketing & Business Development, Product Development, and Consulting functions. The insurance industry has tradionally relied on data sources such as claims history to underwrite known and measurable risk. When a customer uploads an outdated version of forms or ones with missing signatures, the agents experience an interrupted workflow because they have to re-evaluate these forms for the accuracy of the seeded information. While P27 is expected to bring many efficiencies to the payments system in the Nordic region, participating banks will need to take deliberate steps to prepare for this new platform.

## How to make insurance relevant to millennials

----- Arcticle source ----- https://www.wipro.com/blogs/abhishek-mukherjee/ how-to-make-insurance-relevant-to-millennials/ ---- About the Author(s) Contact Wipro Related Blogs Data: A Strategic Asset Enabling Value Creation for Insurers All about NIGO (Not In Good Order) Insurance Service Forms What Banks Need to Know About Nordic Cross Border Payments or P27 Please fill the required details to access the content How to make insurance relevant to millennials May | 2019 The business of insurance, ever since its inception centuries back, has flourished globally. Though customer demographics had been evolving year by year, it has not guite affected the perception of insurance to the global citizen, until the millennials came in. Millennials are less of a demographic and more a psychographic. They are distinctly characterized by their inherent nature of asking for more from brands. They are, in general, tech savvy and prefer to act in a self-directed mode, usually facilitated via digital channels. This really has challenged insurers to think about revisiting their traditional marketing strategies in a bid to connect better with the millennials and to entice them to buy insurance. Interestingly, customer engagement has been an area where the insurance industry has been lagging till date. The overarching goal of marketing for carriers, therefore, is going to be bridging this gap in years to come. Keeping the customers engaged is rewarding - engaged customers typically are high on the loyalty quotient and would not only fetch repeat business for their insurers but also get referrals. Therefore, it is imperative for the insurance carriers to look at marketing as a top priority in this digital age, where technology at hand is a key enabler to newer operating models. Making a connect Does the current scenario mean that insurers should throw in more dollars in their marketing spend across a proliferated digital distribution network via websites, portals, smartphone push notifications, telemarketing, etc.? Well, there is a catch. True marketing success lies in understanding the pulse of the prospect first. Insurance products, by their very nature, require advisory channels to facilitate a sale. If digital marketing talks about a direct reach, one has to respect the symbiotic relationship that exists between product and channel. While some of the complex products still would rely on human intervention, new insurance products are designed keeping customer experience in mind. These products are simpler and easier to be sold via digital channels. Hence, insurers are encouraged to look at innovative digital marketing techniques catering to the newer product lines. There are great examples - Ladder is offering people instant, fully underwritten life insurance online1, resorting to a direct digital marketing and selling channel (No Brokers). On the P&C side, Trov has reinvented insurance with its on-demand platform available to the mobile generation - offering protection for common electronic items2. Marketing is not just propagandizing products via omni channel but making a direct connect to the consumers and redesigning a customer experience that gets them glued automatically. Digital, above all, has facilitated this

proximity to the customers and hence provided an opportunity to embrace new ways of marketing. One key aspect is the shift from insurance as a product to insurance as a service. E.g. Personal Auto was earlier sold as a conventional product for car owners or renters. But with the advent of rideshare insurance, it now reaches a wider audience e.g. passengers who avail cab services want to get insured during the course of their trips. This is both lightweight in terms of premium, and also at the discretion of the consumer. Insurance offerings such as these are thriving because technology is the prime enabler. Distributing insurance to the masses with unprecedented volumes of policy issuance, claims could not have been possible otherwise, as traditional insurers struggle with operational bandwidth. Insurance is being made accessible to consumers effortlessly over a smartphone, with an optional click to enforce a policy. Marketing insurance was never this easy. Another interesting perspective is that, backed by rising disposable incomes, millennials are looking at traditional insurance cover (e.g. auto or home insurance) more as a liability rather than an asset. The focus is shifting towards choosing a cover as and when needed only- once again, millennials demand that these should be on a self-service platform. E.g. opting for an additional cover while going for an adventure sport, opting for travel insurance just for the duration of few hours on a flight. Carriers will have to devise a marketing pitch of "Just in Time" insurance - a fast, direct, simple need based self-purchase option delivered via a smartphone, possibly. Much like the telecom segment that provides customers with fast and convenient "top-ups", just-in-time insurance will not only address the millennial expectations but would also open doors for instant cross sell and up-sell opportunities on the go! Finally, social media will continue playing a key role in marketing insurance. Millennials would like to be sold insurance in a personalized way, and social media intelligence gathering can help insurers track vital life events of people and push timely offers, suggest next best option, etc. through AI systems. Also, valuable feedback, especially on negative customer experiences voiced on the social media will provide important inputs for rectifications on the part of insurers. The realm of insurance is on an exciting trail and it goes without saying that marketing the new forms of insurance would call for creative minds to redesign ways to touch lives of people rather than plain and blatant advertising. References 1 - https://medium.com/ladderlife/heres-whatinstant-life-insurance-really-looks-like-b86ae8f1d4f 2 - https:// www.globalbankingandfinance.com/trov-the-worlds-firston%C2%ADdemand-insurance-app-for-single-items/ Industry: Abhishek Mukherjee Digital Practice Head for Insurance Vertical, Wipro Abhishek has around 17 years of experience with a strong vertical alignment to Insurance. In the field of insurance, he holds professional certifications like LOMA, AINS and has over 10 years of hands-on experience in Strategy & Offerings, Business Process Re-engineering, Marketing & Business Development, Product Development, and Consulting functions. Feroz Rahman Heads the Marketing practice for Insurance, Wipro Feroz has over 9 years of experience in the IT industry, primarily with the Financial Services domain. The insurance industry has tradionally relied on data sources such as claims history to underwrite known and measurable risk. When a customer uploads an outdated version of forms or ones with missing signatures, the agents experience an interrupted workflow because they have to re-evaluate these forms for the accuracy of the seeded information. While P27 is expected to

#### Sharing MEC: Toward a

#### **Cost-Effective 5G**

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environments with radio access networks to not only provide the benefits of aggregation and statistical gains of shared resources, but also allow better response time and throughput. Many 5G services desire to run closer to the user due to one or more of the following reasons: Due to its importance, ETSI (The European Telecommunications Standards Institute) and other standard organizations have defined reference architecture for the MEC[iii]. In their framework, MEC consists of a mobile host, a virtualization or containerization infrastructure, and supporting services such as DNS and traffic rule policies, all working under the control of a platform manager. The platform manager allows running multiple mobile edge applications under the guidance and support of a centralized or distributed operations support system and orchestration. ETSI has also envisioned operating the MEC with various cloud services in order to seamlessly facilitate running applications in either the MEC or cloud. While this is a good step toward running multiple applications on the MEC, there are no explicit standardized mechanisms to dynamically allow sharing of MEC resources among different service operators or application providers. Standardizing the way MEC providers trade their spare capacity to various application and cloud providers will help generate new revenue streams and provide additional ways to recover the costs associated with MEC deployments and operations. This trading can only happen if there is both an efficient, safe and fair resource-sharing mechanism among multiple operators and a marketplace with well-defined APIs that allow MEC operators to dynamically auction off their excess capacity based on traffic projections. To ensure settling, an assurance framework is also needed that can measure the performance of complex service chains and service meshes so that the customer receives what was promised and the complex ecosystem of virtualized and containerized services works in harmony. Unfortunately, as an industry, we are still struggling to address issues such as testing, analyzing and assuring NFV performance; the necessary first steps toward a functioning marketplace. While there has been some research in creating blockchainbased trading marketplaces, we still lack a true marketplace with integrated measurements, assurance, and settlements as well as an ability to isolate systems in case of faults. Communication is becoming another essential utility, just like electricity and water, with a high "last-mile" service cost. Therefore, it is important for us in the communication industry to start thinking in those terms. We still have a long way to go until we can plug any VNF/service into any NFV/container infrastructure, know how much it will approximately cost and how it will perform, and have mechanisms to allow providers to share and minimize unused resources thus maximizing profitability. Reference [i] https://www.mckinsey.com/industries/ telecommunications/our-insights/the-road-to-5g-the-inevitable-growth-ofinfrastructure-cost [ii] https://www.fiercewireless.com/5g/confusion-reignstrump-2020-s-5g-wholesale-vision [iii] https://www.etsi.org/images/files/ ETSIWhitePapers/etsi wp24 MEC deployment in 4G 5G FINAL.pdf Industry: Dr. Manjari Asawa Director of 5G/Connectivity practice Dr. Manjari has over two decades of research, engineering and product management experience in networking and wireless technologies. She received her Ph.D. in Electrical Engineering from the University of Michigan at Ann Arbor and did her M.E. from the Indian Institute of Science, Bengaluru. To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. Salesforce

offers an incredible range of functionalities, making it difficult to find.... A report from Forrester predicts up to 20% of Fortune 500 companies will not make it through 2021 intact. "[For] some, their assets will be dissolved or purchased; others will just go out of business." One possible cause of this is a lack of strategy when investing in and utilizing technology. "The pandemic revealed the flaws in many companies' technology...and their tech leaders were found mired in Band-Aids like tech modernization, Arcticle source ---- https://www.wipro.com/blogs/mehul-damani/ ---- Contact Wipro Blogs By Author The RoI paradox: Key considerations to ensure a higher RoI on your automation initiatives? Please fill the required details to access the content Mehul Damani Mehul Damani Digital Operations & Platforms, Enterprise Operations Transformation, Wipro Mehul is a seasoned digital and automation leader with 12 years of rich exposure dealing with CXO level clients, across Fortune 100 organizations and business domains, such as digital transformation, customer experience enhancement, business strategy, B2B/B2C consulting, marketing, and presales & sales enablement operations. As enterprise automation projects continue to gain more traction, it is becoming very crucial to consider the Return on investment (RoI) for these automation projects.

### The RoI paradox: Key considerations

----- Arcticle source ----- https://www.wipro.com/blogs/mehul-damani/the-roiparadox-key-considerations-to-ensure-a-higher-roi-on-your-automationinitiatives/ ---- About the Author Contact Wipro Related Blogs 4 Ways Super Funds Can Elevate Member Experience The CHRO Imperative for the Hybrid Workplace How organizations should identify and cope with the challenges to cultural transformation? Please fill the required details to access the content The RoI paradox: Key considerations to ensure a higher RoI on your automation initiatives? May | 2019 As enterprise automation projects continue to gain more traction, it is becoming very crucial to consider the Return on investment (RoI) for these automation projects. In fact, as of April 2019, only 13% of enterprises globally have scaled up on automation and only about 11%1 of enterprises have seemingly integrated the three pillars of people (P), process (P) and technology (T) to result in a higher RoI on automation. Digital transformation is a no more a matter of luxury, in fact it is a matter of survival for enterprises, and unfortunately, successful digital transformation is not possible without adoption of digital technologies. Let us specifically look at two of the most talked about digital technologies today, i.e. Robotic Process Automation (RPA) and Artificial Intelligence (AI). According to Deloitte's third annual RPA survey, 53% of enterprises are beginning their "RPA journey", and amongst those who are implementing RPA now, 78% plan to invest even more in the next three years. AI implementation, on the other hand, by enterprises expects to boost productivity by up to 40%. With these statistics, considerations and conversations on RoI are bound to be of paramount. Based on the scale of

adoption of RPA & AI, enterprises can be demarcated into any of the following categories: [1] https://www.horsesforsources.com/rpa-deadintegrated-automation-platforms 041519 [2] https://blog.walkme.com/9digital-adoption-statistics/ Figure 1: Classification of enterprises basis strategic & tactical considerations Figure 1 represents the breadth of addressing strategic and tactical considerations on the Y-axis and percentage of probability to envisage higher RoI on the X-axis. The probability of envisaging right RoI from automation is directly proportional to the number of considerations addressed, the higher the number of strategic and operational considerations addressed correctly, the higher the RoI on automation. The integration of automation, with the key pillars of people, process and technology is paramount to ensure a higher RoI on deployed initiatives. Automation today is beyond RPA & AI, to include other technologies such as Blockchain, Virtual reality, Internet of Things (IoT) etc. Thus RPA & AI cannot be looked at in isolation and they can be linked thus by using the "AND" logical operator. It is thus not only about Robotic Process Automation or Artificial Intelligence or Machine Learning but is also about using them in conjunction by using the AND operator, so that it becomes RPA AND AI AND Blockchain AND Machine Learning AND Analytics and when all of these are integrated, RoI calculations become even more complex. Let us try to address some key considerations for ensuring a higher RoI on RPA & AI. These considerations can be rightly classified as per priority of enterprises into two categories, that is, strategic and tactical. While strategic considerations are at the forefront of automation initiatives using RPA and AI, there is an equally important set of considerations that need to be examined, as these are fairly tactical. Some of the indicative strategic considerations could be: Some of the indicative tactical considerations could be: Enterprises shall ensure a balance of strategic and tactical considerations that are to be addressed for envisioning holistic return on their digital and automation initiatives. Let us further plot some of the considerations in a matrix format: Figure 2: Strategic & Tactical considerations on automation for enterprises In Figure 2 The Y-axis talks about the number of considerations (strategic & tactical) that enterprises need to consider with a varying degree of Low, Medium & High. The number of considerations is classified as High, Medium & Low indicating the range of considerations that enterprises should examine while deploying automation. While around 26 considerations are listed in the figure low number of considerations are defined as enterprises executing up to 30% of the considerations correctly, medium being defined as 30%-50% and medium-high would be 50%-70% and high would be enterprises addressing >70% of the considerations in a correct manner. The X-axis talks about a range of tactical and strategic considerations in no particular order of priority or hierarchy as all strategic and tactical considerations are to be recognized and addressed together. Considering the relatively lower penetration of AI and RPA globally (<20% of enterprises), enterprises that are able to recognize and address at least 70% of all considerations put together, are likely to get a higher RoI and have been classified as "Early Adopters". Enterprises getting 50%-70% of considerations right have been indexed as "Initiators", the ones addressing 30%-50% are labelled as "Followers" and the rest of enterprises addressing <30% of considerations as "Laggards". If enterprises have answers to at least 70% of the considerations, there is a high probability that they will realize high ROI

from their automation initiatives because they are already on the mode of implementation. As humans, the value created via automation initiative deployed is also increasingly measuring stakeholders at enterprises. Enterprises are talking about benefits such as up to 50% improvement in transaction processing time, up to 30-40% decline in headcount, 100% efficiency in transactions or improved workforce productivity by 30-40%. The higher the number of strategic & tactical considerations addressed correctly by enterprises, the greater is the probability for ensuring a higher RoI on automation. Industry: Mehul Damani Digital Operations & Platforms, Enterprise Operations Transformation, Wipro Mehul is a seasoned digital and automation leader with 12 years of rich exposure dealing with CXO level clients, across Fortune 100 organizations and business domains, such as digital transformation, customer experience enhancement, business strategy, B2B/B2C consulting, marketing, and pre-sales & sales enablement operations. Despite the long-standing history of private pension plans, superannuation was introduced to Australians over 20 years ago to help them support their retirement in a financially viable way. Fast forward to 2020; it is now a A\$3T business. Over the last two decades, superannuation has become complex, highly regulated, and vulnerable to scandals. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just neglected culture.

www.wipro.com/blogs/samit-das/ ---- Contact Wipro Blogs By Author APIs for Banks The New 'LAMP' Please fill the required details to access the content Samit Das Samit Das Principal Architect with the Global Enterprise Architecture Consulting practice Samit Das is a Principal Architect with the Global Enterprise Architecture Consulting practice. He creates solution blueprints for digital transformation journeys and helps customers adopt emerging technology ecosystems and innovate. Prior to his current role with Wipro, he was involved in building digital solutions and platforms for digital marketing, customer experience, and crafting solution architecture for large transformation programs. He has wide experience in enterprise architecture patterns, digital disruption and competitive differentiation using architecture vision and principles. He is a passionate Toastmaster and speaks at different forums and conferences on Humor, Communication, Storytelling, Leadership, Teamwork, Winning, Technology, and Digital Disruption. APIs can make a traditional bank continue to be a financial powerhouse in this new age economy More than two decades ago, when the world was busy learning Windows on desktops, Y2K was still a few years away. =============

#### The New 'LAMP'

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Growth A Modern Definition of Developer Productivity Please fill the required details to access the content The New 'LAMP' May | 2019 More than two decades ago, when the world was busy learning Windows on desktops, Y2K was still a few years away. Being able to open multiple windows on our desktops created a new window of opportunity for those who wanted to do multiple things simultaneously. Desktop computing soared and Microsoft catapulted to a different orbit. As we opened Windows on our desktops, Mosaic (Netscape) opened up a new window to the world, and to the Web through the Netscape browser. It garnered 75% market share within a quarter of its release and an IPO followed within 10 months. The IPO was so successful that it inspired a whole generation of entrepreneurs to start tech business. More importantly, as Thomas Friedman said, "Netscape has made the world flat by democratizing the web." Consumer applications started being part of our lives with mobile phones glued to our palms in the post-2007 era. Performance and personalization demanded real-time response at the speed of tap, scroll, and swipe left, swipe right (multiple fingers on mobile as opposed to one mouse in a laptop). The Internet's scale and resilience has become the defining opportunity of this era. This is where cloud started changing the game of computing with its spider web around the world. Over the years, Cloud has become an omnipotent force with omnipresent spider web of Cloud zones, regions, clustering across zones/regions, load balancing, containerized scaling, platform services and now with serverless computing. Let alone the fact that cloud today stores more than 1 Exabyte (1024 petabyte) of data and is scaling beyond that, what is fascinating about cloud is that every layer is programmable and can be consumed as a service on demand at the scale you need. After working with cloud platforms for several years, it dawned on me that the new LAMP stack is now running on the cloud. As they say, the power of technology lies not in the technology itself but in how it brings business outcome or business value to end users. At Wipro, our Cloud Architects help our customers make right decisions in each layer of cloud stack above to generate business value for end customers/consumers: Long live the new LAMP! References: 1. https://en.wikipedia.org/wiki/ Netscape#cite note-:0-18 2. https://www.amazon.com/World-Flat-History-Twenty-first-Century/dp/0374292884 3. https://commons.wikimedia.org/wiki/ File:Netscape Navigator 2 Screenshot.png 4. https://fowmedia.com/ company-leverage-cloud/ 5. https://www.dreamstime.com/abstractconnection-dots-technology-background-digital-drawing-blue-themenetwork-concept-d-rendered-image102304193 Industry: Samit Das Principal Architect with the Global Enterprise Architecture Consulting practice Samit Das is a Principal Architect with the Global Enterprise Architecture Consulting practice. He creates solution blueprints for digital transformation journeys and helps customers adopt emerging technology ecosystems and innovate. Prior to his current role with Wipro, he was involved in building digital solutions and platforms for digital marketing, customer experience, and crafting solution architecture for large transformation programs. He has wide experience in enterprise architecture patterns, digital disruption and competitive differentiation using architecture vision and principles. He is a passionate Toastmaster and speaks at different forums and conferences on Humor, Communication, Storytelling, Leadership, Teamwork, Winning, Technology, and Digital Disruption. Enterprise Mobility Management (EMM) involves the process

management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to reexamine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

#### **APIs for Banks**

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history. The app also provides a mortgage calculator and other financial tools and can help to connect with realtors nearby. Through APIs, the bank has thus created a continuous journey for the customer to look-up the price, calculate the mortgage, connect with the realtor and apply for a loan. (5), (6) Extend offerings of products and services In the guest to provide high-value scenarios for customers, banks eventually look for options to extend the core banking offering by discovering additional services and products along the journey. For example - analysis of cash flow, management of accounts receivable are areas to build new services on, beyond the core services offered by the bank today. This - over a period of time - helps the bank emerge as an aggregator of products and services. Experience and information APIs don't just make the aggregation possible, they also make the aggregation of products and services, dynamic, real-time and personalized. E.g. Under Open Banking directives, banks are publishing APIs for 3rd-party developers and partners to develop additional services on regulated access to existing products and services (Bank of America developer portal, Citibank developer sandbox, BBVA API marketplace, Capital One dev Exchange) (7), (8). Some banks and financial service providers are aggregating APIs from multiple financial service providers into a single API (Figo). APIs make the bank create a value network across industries and a large portfolio of offerings. It helps the bank protect their business against disintermediation from the tech giants and the Fintech start-ups. Reposition own assets Banks are generating tons of data. For example - HSBC has 39 million (9), Barclays - 24 million (10) and Capital One - 45 million (11) customer accounts. Banks possess not just demography data, and spending pattern of the customers, but also data related to the journey of customers in digital channels. APIs can unlock the real value of this asset by helping to create a network effect around this asset faster. For example - experience APIs externalize information about banking products and services in the context of the customer journey. More interesting is the fact that as experience APIs are accessed, they can help track the journey of the customer further. This rich customer footprint helps to create further "valuable" set of APIs. The APIs not only help in recommending and selling the bank's products and services but also help in selling products and services of ecosystem participants - thereby creating a new revenue stream by monetization of APIs. The solutions and ecosystems of banks enable customer experience at a faster pace (weekly sprints and continuous deployments) than the back-end legacy systems and solutions. Back-end solutions of a bank (banks still run mainframe for many business functions) changes much slower - through quarterly or monthly releases. APIs sit in the middle of fast-moving customer-facing solutions and back-end legacy systems to synchronize the two modes of IT so that the old legacy asset is not a constraint for the young digital face of the new-age bank. Conclusion APIs need to be a part of the business strategy of new-age banks. Even though API adoption is higher for payment-centric customer interactions, a bank's API strategy needs to be holistic and consider the entire value chain of the customer. A holistic look at the value chain and a well-thought-out API Strategy will reposition a bank's assets towards new and potential offering, broaden the offering with new products & services, and finally deepen the experience with customers. In this age of networked financial ecosystems, API has the potential to multiply the return on investments for new products and services and make the traditional bank an

agile, new-age, digital player. What we do Our architects at Wipro look at the enterprise landscape of customers, the aspiration of the enterprise, state of digital integration and devise an API strategy. Our API strategy helps organizations build an API-led foundation of the enterprise to support current business, experiment with innovative offerings, enhance customer experience, scale business with new channels and monetize new business opportunities using the power of value network and interoperability of systems and solutions. Our architects and practitioners help to: References: 1 - https://www.investopedia.com/articles/investing/122315/worlds-top-10banks-jpm-wfc.asp 2 - https://www.businessinsider.com/fintech-ecosystemreport, https://www.mckinsey.com/industries/financial-services/our-insights/ synergy-and-disruption-ten-trends-shaping-fintech 3 - https:// www.forbes.com/sites/tomgroenfeldt/2014/09/17/banking-vs-google-appleand-amazon/4 - https://www.openbankproject.com/psd2/5 - https:// www.youtube.com/watch?v=o9T9crNMB w 6 - https:// thefinancial brand.com/17766/commonwealth-bank-augmented-realityiphone-ad/7 - https://sandbox.developerhub.citi.com/api-catalog-list? field api market tid=50 8 - https://developer.bankofamerica.com/ CPODevPortal/apidocs/public/APIDevPortal.html#/home 9 - https:// www.about.hsbc.co.uk/ 10 - https://home.barclays/investor-relations/reportsand-events/annual-reports/2017/11 - https://www.capitalone.com/about/ Industry: Ankur Pahariya Assistant Manager, Strategic Marketing, MAS Ankur looks after marketing for Cloud Application Services ensuring that Wipro's Cloud proposition reaches the target audiences effectively. He comes with a unique blend of working in mainstream retail with a globally renowned retail group, retail in start-up domain and the non-profit sector. A keen analyst, marketer, strategist and implementer, Ankur has strong interest in evolving concepts like Analytics, Big Data, Digital Marketing and Web Analytics. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to reexamine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/arun-trivedi/ ---- Contact Wipro Blogs By Author Is your business transformation agenda covering these six key areas? Please fill the required details to access the content Arun Trivedi Arun Trivedi Digital Partner - Technology BU, Wipro Ltd. Arun specializes in defining ITenabled business transformation roadmaps, service monetization, quote tocash business processes, and revenue recognition for clients. He has been involved in helping clients, from defining their business challenges to leveraging technologies to resolve business problems and enable benefits realization. As hi-tech business models morph to accommodate new digital channels, new revenue streams, recurring revenue opportunities, and go-tomarket strategies, companies need to be conscious of change across the 6 key dimensions as well. ==============

## Is your business transformation agenda covering these six key areas?

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### Apple's next-gen customer -Business communication platform

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within Messages. Using Business Chat, your customers can get answers to questions, resolve issues and complete transactions on their iPhone, iPad, Mac and Apple Watch". Customers can discover and initiate a business chat conversation from Apple Maps, Spotlight search, SIRI results, Safari listings or iOS apps with the actual conversation happening in the iMessage app on the Apple device (in a form of communication that the customers already know). The continuum of experience established by Apple's ecosystem of devices and services enables a user to initiate an action from one Apple device and securely carry forward the conversation to any other Apple device (either continuing the same activity or progressing to a sequence of different activities). This is brought to life by the frictionless handoff between the Apple devices (iPhones, Macs, iPads or Apple Watches) collaborating and complementing one another with relevant information or functionality. Apple's emphasis on "privacy ensures that the customers are the ones to initiate a conversation on the business chat, and no customer information is shared with the business (including user credentials, profile, contact information, personal details or browsing history) thereby warding off unsolicited advertisements, offers or spams from the business. Apple's approach has been to make Business Chat a "valuable" and "useful" product to its audience which is easy to use, efficient and designed with privacy in mind - unlike other messaging platforms that are mostly designed to monetize their users. Customers today seek a multi - (digital) device experience that is consistent and continuous, as they switch / interact with more than one digital device to accomplish their tasks over time. Though each device plays an important role - a "tablet" for content consumption, a "PC" for content creation, a smartphone for "Mobile communications" and a smartwatch for "health and fitness"- the real power of these devices is in how they are used together in creating a "natural and a fluid experience" that serves user's needs between the series of interactions and contexts with multiple digital devices. From making compelling digital devices to cross selling digital services on their devices, Apple has created a digital ecosystem with a loyal customer base - leading to the adoption of iOS devices (and stickiness) into their customers "digital lives". With Business Chat - Apple is laying the foundation of a platform, that would enable businesses to create "a seamless and a unified customer service experience" for their customers without encroaching upon their privacy. The platform is based on a hybrid approach such that when a sophisticated human response is required (in cases of an angry customer or someone with an emotional request), the platform smoothly hands over the conversation to a live agent (an expert), thereby combining intelligent engagement with human intelligence to provide the best customer experience. LOOKING AT THE FUTURE If this is the future of smart business communication, messaging and support, what would it look like from a user's perspective? To begin with, it is possible to place quick access links to the business messaging service right next to the business URL of an organization (ex: a manufacturer of washing machines or a provider of travel products). This makes the business messaging service easily discoverable. Users need to just click on the link and talk to the 'hybrid' system at the other end. User can initiate the action from one Apple device and securely carry forward the conversation to any other Apple device, enabling brands to better engage with their customers, through any channel depending on their preference. It is simple to see that the overall effect of the integration would be a seamless

and consistent user experience—something that is not possible today for users of other messaging platforms where the platforms are independent and isolated from other applications on the user's device. Simple as it sounds, organizations wishing to create highly consistent, continuous and integrated digital experiences (across Apple Devices and Apple Services) would need to work with a technology partner that understands customer experience, has the technical prowess to enable AI-driven intelligent systems, has domain capabilities along with the tools and the expertise in Apple's devices, platforms and services ecosystem. Industry: Nagendra Singh Principal Consultant for Wipro's Apple Practice Nagi has a strong blend of business, technology and consultative skills. His diverse experience includes Enterprise Architecture, consulting, international business development, and new business incubation & strategy. He is passionate about "Everything Apple" and his current work focuses on evangelizing and designing human-centric solutions using Apple's entwined ecosystem of devices, platforms and services to address business needs. To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. Salesforce offers an incredible range of functionalities, making it difficult to find.... A report from Forrester predicts up to 20% of Fortune 500 companies will not make it through 2021 intact. "[For] some, their assets will be dissolved or purchased; others will just go out of business." One possible cause of this is a lack of strategy when investing in and utilizing technology. "The pandemic revealed the flaws in many companies' technology...and their tech leaders were found mired in Band-Aids like tech modernization, simplification, and consolidation."

### Siri, what's the news on 'voice' in my enterprise?

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Oracle and Apple. The question is who will set the pace and the rules of the game? At the moment, it would be safe to bet that Apple's Siri is already in the frontlines, ahead by leagues. Voice interfaces are a paradigm changing technology. Just as the advent of the iPhone with its features like GPS made groundbreaking services like Uber and AirBnB possible and the arrival of powerful rechargeable batteries is making Electric Vehicles (EVs) possible, voice is set to create innovative new businesses/ services and improve efficiency in the enterprise by simplifying computing and making it accessible to all. And the voice assistant of choice in the enterprise will be Apple's Siri. The reason for this is not too difficult to see: Siri has a rich ecosystem of developers that are well-known for the focus on "change the world" ideas. Over the last three years, ever since Apple began allowing developers to bake Siri into their apps and services, there have been notable advances in the consumer space. Siri can check booking information at AirBnB, interact with coffee machines, track projects on Basecamp, and do lots of other wonderful stuff. Siri has a rich eco system of devices and services such as iPhone, iPad, iPod, Watch, AirPods, HomePod, iCloud, maps, music, CarPlay, automation, translation, etc., that change the enterprise scenario. In fact, it is the super smart Siri that stitches the completely secure Apple ecosystem together, almost presenting itself as a universal OS that makes it possible to work seamlessly across devices. Siri uses natural language, unlike its competitors that use "voice commands". For example, Siri can understand "lights on" while the others need to hear "Switch on the lights". While this may seem trivial, the natural language capabilities of Siri turn it into a truly intelligent and intuitive assistant that functions uncannily like a human. Siri keeps identity anonymous unlike other voice assistants that collect user data. In a world of growing privacy concerns, this keeps Siri ahead in the brownie points leaderboard. While most voice assistants store data in a way that can be traced back to the user, Apple anonymizes it (Siri interactions are stored for six months by Apple but without personal identifiers). Most tasks that call for personalization are executed on the device itself. Investments Apple has been making in startups to make its voice assistant better. Some examples include investments in VocalIQ that is developing an application that will allow Siri to remember past conversations and maintain context using the learning; Pullstring that makes voice experience design tools for developers who want to easily deploy voice appsiv; and Lattice Data that makes sense of unorganized data such as imagesy. For an enterprise keen on simplifying its compute environment, the choice of a voice assistant is a no-brainer. Siri wins hands down—because it is rapidly moving from being a mere voice assistant to an intelligent `human' assistant. References: i https://techcrunch.com/2018/03/07/47-3million-u-s-adults-have-access-to-a-smart-speaker-report-says/ii https:// www.gartner.com/en/newsroom/press-releases/2019-01-09-gartnerpredicts-25-percent-of-digital-workers-will-u iii https:// www.globenewswire.com/news-release/2019/03/25/1760147/0/en/Global-Conversational-AI-Market-Forecast-to-2024-Integration-of-Advanced-AI-Capabilities-Adding-Value-to-the-Conversational-AI-Offering.html iv https:// www.cultofmac.com/607148/apple-buys-pullstring/ v https://techcrunch.com/ 2017/05/13/apple-acquires-ai-company-lattice-data-a-specialist-inunstructured-dark-data/ Industry: Nagendra Singh Principal Consultant for Wipro's Apple Practice Nagi has a strong blend of business, technology and consultative skills. His diverse experience includes Enterprise Architecture,

Consulting, International Business Development, New Business Incubation & Strategy, and Thought Leadership. He is passionate about "Everything Apple" and his current work focuses on evangelizing and designing humancentric solutions using Apple's entwined ecosystem of devices, platforms and services to address business needs. To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. Salesforce offers an incredible range of functionalities, making it difficult to find.... A report from Forrester predicts up to 20% of Fortune 500 companies will not make it through 2021 intact. "[For] some, their assets will be dissolved or purchased; others will just go out of business." One possible cause of this is a lack of strategy when investing in and utilizing technology. "The pandemic revealed the flaws in many companies' technology...and their tech leaders were found mired in Band-Aids like tech modernization, simplification, and consolidation." www.wipro.com/blogs/vijayeswar-malladi/ ----- Contact Wipro Blogs By Author Service Bureau Model - A New Normal in Customer Care and Billing Operations for Utilities Utilities: Is it time to modernize your CIS platforms? How Utilities can harness the power of Artificial Intelligence for exception management Customer Experience Preconfigured for Utilities of the future Please fill the required details to access the content Vijayeswar Malladi Vijayeswar Malladi Global Head - Oracle Industry Solutions, Wipro Limited Vijay Malladi has over 20 years of experience in IT and heads Oracle Industry Solutions Practice at Wipro. Vijay has played various roles in Competency Leadership, Digital Customer Experience, Utilities CIS and Cloud Solutions. He is a regular speaker at Oracle events and Customer Forums. With increasing deregulation, expanding regulatory oversight, digitally driven customers, and pressure on revenues, utility companies are constantly looking for new business models and solutions. How utilities can meet changing customer expectations and improve business processes with Oracle Customer Cloud Service (CCS) Utilities have been consistently investing in addressing two key challenges: Improving revenue and boosting productivity. Wipro's Customer Experience Management solution for Utilities, leveraging Oracle Cloud =================

### Customer Experience Preconfigured

#### for Utilities of the future

----- Arcticle source ----- https://www.wipro.com/blogs/vijayeswar-malladi/ customer-experience-preconfigured-for-utilities-of-the-future/ ----- About the Author(s) Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Customer Experience Preconfigured for Utilities of the future June | 2019 Wipro's Customer Experience Management solution for Utilities, leveraging Oracle Cloud Utility customers are evolving at an unimaginable pace. Not only do they want the entire stack of smart and convenient digital services that their retail and financial services providers have been pampering them with, they now want to take mighty leaps ahead. Today's utility customers want complete control over what they consume and when they want to switch to battery/renewable sources; how they get incentivized and rewarded; how they give back power to the grid and the price points at which they are willing to do so. No other industry is creating prosumers on the same scale as a utility. This is forcing the traditional Customer Care & Billing (CC&B) space to evolve into more sophisticated Customer Information Systems & Relationship Management Systems (forecasted to be \$61.1Billion in the next decade). The problem with typical utility systems is that they can take 18 to 24 months to design, develop and implement while today's business environment has made that untenable. Utilities can't afford to wait more than 10 to 12 months. The solution lies in a digital, cloud-based Customer Information System (CIS)-as-a-Service -"Wipro's Customer Experience Management Solution for Utilities". Some of Wipro's utility customers in highly advanced energy markets like APAC, Europe, UK and the Middle East have already leveraged this solution and have reduced their implementation time by 30 - 40%. One of the key reasons customers want Wipro's digital cloud-based CISis because they can get a feel for a comprehensive range of preconfigured digital solutions with demos during the design phase itself (no waiting for UAT!). Any customization that is required can then lead to quick prototyping and rapid implementation. The solution covers functional areas from customer onboarding, metering, billing, payments, collections, CRM to customer experience and omnichannel self-service capabilities (covering mobile, web and social media). WithOracleC2M/CCB/MDMplatformsintegrated with Oracle CX Cloud in a hosted and managed service model, the solution takes the pain out of modernizing customer-facing processes. For example, instead of procuring and managing Oracle licenses, hosting infrastructure and running operations, the utility needs to pay a small fee and free itself to focus on more important business elements. In addition, the utility has the flexibility to choose an OPEX or CAPEX model. Wipro's Customer Experience Management Solution for Utilities works with a number of tools, Wipro IPs around Oracle and prebuilt integration adapters that have easy plug-andplay capabilities. It has a datamigration accelerator, its own geo-specific market messaging solution, dashboards for monitoring operations, training modules and pre-built custom reports. Among the more advanced capabilities the solution provides is access to Wipro's Athena, an AI-based exception handling solution, purpose-builtfor Oracle Utilities customers. Athena is designed to allow the system to continuously improve, thereby boosting efficiencies and reducing operating costs on a sustained basis. Utility customers have the confidence that the solution will provide exceptional results because it is based on Wipro's well-established Oracle expertise and is combined with the experience of managing 20+ large utility transformations across the globe. The technical vast store of domain experience and expertise provides Wipro the ability to create solutions that not only improve customer experience but also lower TCO and boost ROI.

Industry: Vijayeswar Malladi | Global Head - Oracle Industry Solutions, Wipro Limited Vijay Malladi has over 20 years of experience in IT and heads Oracle Industry Solutions Practice at Wipro. Vijay has played various roles in Competency Leadership, Digital Customer Experience, Utilities CIS and Cloud Solutions. He is a regular speaker at Oracle events and Customer Forums. Rathish Sreekantan Consulting Manager - Energy, Natural Resources, Utilities & Construction, Wipro Limited Rathish has 14 years of experience in Utilities consulting, solutions design and pre-sales support. He has been a part of large-scale CIS and Smart Metering transformation programs using Oracle Utilities solutions. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern 

## How Utilities can harness the power of Artificial Intelligence for exception management

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the industry for decades. Typically, teams of managers and executives wade through different applications to determine exceptions and anomalies, conduct a root cause analysis (RCA) and create resolutions. Each problem can take between one to four hours to resolve. However, Athena - an AIbased solution on Wipro's HOLMESTM platform for Oracle Utilities users can reduce this to less than 2 minutes. Athena sits on top of the Oracle Utilities Billing Component and learns everything that an exception manager does. It then begins to mimic the processes and actions of the managers. It simultaneously uses Machine Learning and, eventually, over a period of time resolves exceptions on the fly without human interaction. Athena works by validating every solution it comes up with ("I am 80% certain of this solution. Do you agree?"). As it learns, it increasingly avoids going through process steps and reaches near perfection. Athena has shown that exception resolution process efficiency can be increased by a remarkable 95%. The end result is that customer issues are resolved faster and more accurately, improving CSAT; there is a reduction in disconnections, overspends and late fee collections; cash flows improve; there is a notable reduction in human dependencies, leaving executives with more time to fruitfully interact with customers; and regulatory penalties, legal costs and public embarrassment are avoided. There is an abundance of opportunities to use AI and Machine Learning across the utilities value chain that has traditionally been manually driven. Utilities are examining the use of these technologies to improve customer engagement, impact infrastructure management and reduce outages. With Athena, utilities can quickly harvest the upside of AI for exception management, resulting in revenue and productivity improvements. References Industry: Vijayeswar Malladi Global Head -Oracle Industry Solutions, Wipro Limited Vijay Malladi has over 20 years of experience in IT and heads the Oracle Industry Solutions Practice at Wipro. He has played various roles in Competency Leadership, Digital Customer Experience, Utilities CIS and Cloud Solutions. Vijay is a regular speaker at Oracle events and Customer Forums. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern 

# How utilities can meet changing customer expectations and improve business processes with Oracle Customer Cloud Service (CCS)

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www.energymagazine.com.au/what-utilities-need-to-know-about-the-five-minute-settlement-rule/

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### Service Bureau Model - A New Normal in Customer Care and Billing Operations for Utilities

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===========================----- Arcticle source ----- https:// www.wipro.com/blogs/vikram-jadhav/ ----- Contact Wipro Blogs By Author Discover the Latest Tools & Trends To Manage NPE (Non-Production Environments) Please fill the required details to access the content Vikram Jadhav Vikram Jadhav Principal Consultant, Non-Production Environment Management Practice, MAS-QET at Wipro Ltd. He has 17 years of work experience in QA and Non-Production Environment Management in business domains such as BFSI, Telecom, Retail and consumer goods and services. He comes with a proven track record of effectively shaping, managing and growing successful businesses and technology programs, building strong teams, running large delivery engagements while consistently coming up with innovative ideas in pre-sales and delivery. Organizations that have

## Discover the Latest Trends & Tools to Manage NPE (Non-Production Environments)

----- Arcticle source ----- https://www.wipro.com/blogs/vikram-jadhav/discoverthe-latest-tools-trends-to-manage-npe-non-production-environments/ -----About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Discover the Latest Tools & Trends To Manage NPE (Non-Production Environments) June | 2019 Organizations that have recognized the need for Non-Production Environment Management (NPEM), and implemented this function as a centralized service of their IT teams, are far ahead in the game when compared to their peers who are yet to catch up in setting up a dedicated NPEM team. NPEM as a function has evolved from a basic set of coordination tasks to a comprehensive ITIL aligned service; responsible for bringing in high efficiency in non-production environments. In today's world, where we are experiencing fast-paced technology changes, there is a need for NPEM departments / teams to keep pace and leverage it to gain further efficiency. In this blog, we shine a light on key trends and tools that NPEM can leverage: On-demand environment provisioning As opposed to the on-premises environment, Cloud-based environments can be built and provided to QA teams in almost no time. On-demand environment provisioning powered by cloud providers are best suited to projects executed in Agile and DevOps methodologies. All the benefits of cloud computing can be availed such as elasticity, low capital expenditure, high availability, durability and security etc. Infrastructure as a code (IaaC) is being leveraged for spinning-up the environment guickly. It is the process of managing data centers through machine-readable definition files, as opposed to the physical hardware configuration. The blueprint of a datacenter is versioned through high-level configuration syntax, much like the versioning of code. Containerization technology is also trending, which is an OS-level virtualization method used for deploying and running distributed applications. It eliminates the need for launching an entire virtual machine (VM) for each application. The benefits of containerization include ease of deployment and configuration, high scalability, increase in productivity, multiple server consolidation and thus, reduction in costs. Service providers / vendors are supposed to perform the sanity check, basic infrastructure assurance as well as cloud assurance before handing it over to the clients for utilizing the environments for their non-production activities - development, QA etc. Service Desk aligned with Cloud The Service Desk/Incident Management team has the responsibility of getting Environmental incidents resolved and ensuring that non-production environments are up and running. When you have Cloud-based nonproduction environments, the Service Desk team needs to have a good understanding of cloud as well as a good connect with cloud providers to get incidents and service requests resolved. Also, adoption of Self Service portals is a must to have basic issues resolved by users themselves such as password reset, access provisioning etc. Non-Prod Environment Monitoring Organizations have been investing in monitoring tools only for production environments for the obvious reasons of business criticality. However, there is an increasing trend to have agentless, automated, real-time monitoring of non-production environments to prevent defects, early identification of defects, minimize incidents, and increase environment availability. In case of Cloud based environments, every cloud platform provides built-in monitoring services to get insight into the overall health of environments. Automated Configuration Management Database (CMDB) An increasing trend in CMDB automation has been observed. Automated identification of IP-enabled configuration items (CIs), mapping of their interdependencies, updating and maintaining them in the CMDB. Automated tools such as ServiceNow Discovery help in real-time data updates to keep CIs up to date, both populating CIs in the CMDB and updating fields within those CIs as and when they change. Automated Release Management: Build deployment automation - CI/CD As DevOps is getting widely adopted, having skills and capabilities in automated release and build deployment has become a must. Several clients have already recognized the need for standardization of Release Management process and have been demanding vendors bring in Automation in Release Management by implementing the CI/CD pipeline; aiming to improve Time to Market (TTM) and release frequency. ITIL aligned, One-stop shop NPEM Tools Organizations are looking for and adopting a comprehensive ITIL-aligned tool which can be used as a one-stop shop to take care of all the functions of non-production environment Management including, Service Desk / Incident Management, Change Management, Release Management, Configuration Management, Environment Management, Batch Operations and advanced real-time Service Virtualization Organizations have realized the need for Service Virtualization as it eliminates the dependencies of having all critical or third-party applications, hence proving to be a huge cost saver. Service Virtualization is the emulation of the behavior of components or certain critical functionalities of applications which cannot be made available in lower environments such as Development or System Testing environment. It allows complex applications to undergo integration testing much earlier in the development process - uncovering certain critical defects in a much earlier phase. Service virtualization is an important aspect and key lever for 'Shift-left' approach in overall quality engineering. Auto-healing Bots Leveraging AI/ML and analytics, Monitoring tools further can auto-create incidents for critical alerts, and trend analysis of repeat issues can prevent their recurrence. These bots detect system failures and automatically fix them through self-learning and self-healing. The bots with environment monitoring and auto-healing capabilities are trending and evolving to bring tremendous efficiency. Following are the popular tools in this space: With fast-paced technological changes, Cloud Conclusion migration, DevOps adoption etc. there is a major focus on Automation at every stage in IT landscape. With these advancements, Environment Management as a function must leverage the benefits of all the latest technological trends & tools in managing NPEs to achieve overall efficiency.

Industry: Vikram Jadhav Principal Consultant, Non-Production Environment Management Practice, MAS-QET at Wipro Ltd. He has 17 years of work experience in QA and Non-Production Environment Management in business domains such as BFSI, Telecom, Retail and consumer goods and services. He comes with a proven track record of effectively shaping, managing and growing successful businesses and technology programs, building strong teams, running large delivery engagements while consistently coming up with innovative ideas in pre-sales and delivery. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to reexamine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/vaidyanathan-balasubramanian/ ---- Contact Wipro Blogs By Author Algorithmic Accountability Act of 2019 - Challenges & Opportunities Please fill the required details to access the content Vaidyanathan Balasubramanian Vaidyanathan Balasubramanian Principal Consultant, Data, Analytics and AI Practice, Wipro Vaidyanathan has close to 17 years' experience spanning analytics, AI, program management, account management, IT infrastructure, and IT services. He has worked in multiple verticals such as BFSI, Healthcare, Telecom, Manufacturing, IT operations amongst others. The Algorithmic Accountability Act has been introduced in the USA to specifically provide a legal reference framework to cover issues such as algorithmic biases that may affect delivery of services to citizens and consumers. ============

## Algorithmic Accountability Act of 2019 - Challenges & Opportunities

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as necessary. The bill is currently a draft bill and available for download and public debate/feedback. As AI led solutions become central to policymaking and business strategy, introduction of such legislation is timely. Elsewhere in Europe, GDPR has various provisions dealing with this subject. Hong Kong (HKMA) have announced guidelines that are currently "voluntary" in nature. Organizations such as the UN and OECD have initiated forums and debates on this topic. It is an idea whose time has arrived. If passed in the current form, The Algorithmic Accountability Act of 20191 will mandate that all covered entities who deploy automated decision systemsthat affect a "consumer" will have to mandatorily conduct automated decision system impact assessments and data protection impact assessments. These assessments cover evaluation of algorithms in terms of their accuracy, fairness, bias, discrimination, privacy and security, use of personal data, security of information systems and stores. Let us now understand some of the most important definitions as per the Act. As you can imagine, these legal developments can be seen as restoring the balance between the digital AI-powered corporations and the data subjects - the citizens. They throw up a variety of challenges and opportunities for AI adoption. Let us discuss the same. Challenges Opportunities All in all, these are very exciting times for widespread AI Adoption. The legal developments could be viewed as a speed breaker or a slingshot. The jury is out there. Reference Industry: Vaidyanathan Balasubramanian Principal Consultant, Data, Analytics & AI, Wipro Vaidyanathan has close to 17 years' experience spanning analytics, AI, program management, account management, IT infrastructure, and IT services. He has worked in multiple verticals such as BFSI, Healthcare, Telecom, Manufacturing, IT operations amongst others.. 5G is a complex network that involves millions of interconnected devices and offers lowlatency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decisionmaking and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. www.wipro.com/blogs/ed-omland/ ----- Contact Wipro Blogs By Author Faster, Simpler, Cheaper: How a New Platform is Automating Upgrades to Oracle Cloud for a Faster Time to Value Please fill the required details to access the content Ed Omland Ed Omland Vice President, Strategic Alliances, Oracle Over his 23 years of experience, Ed has been successful in taking new technology to the market, helping companies create a strategic competitive advantage through technology. In his current role, Ed owns strategic relationships with major global solution integrators of Oracle, including Wipro. Wipro's Quick Migration to Oracle Cloud (QuMiC)

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#### Faster, Simpler, Cheaper: How a New

### Platform is Automating Upgrades to Oracle

#### Cloud for a Faster Time to Value

----- Arcticle source ----- https://www.wipro.com/blogs/ed-omland/fastersimpler-cheaper-how-a-new-platform-is-automating-upgrades-to-oraclecloud-for-a-faster-time-to-value/ ---- About the Authors Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Faster, Simpler, Cheaper: How a New Platform is Automating Upgrades to Oracle Cloud for a Faster Time to Value June | 2019 Businesses have long understood the powerful benefits of cloud computing. The cloud provides a reliable compute platform that virtually guarantees up-to-date, best-in-class, anytime capabilities, delivered securely and cost-effectively. Increasingly, companies are embracing the cloud to deliver an enormous range of apps and services, especially in light of its growing acceptance by the compliance community. Cloud models have matured quickly, but moving business applications to the cloud are still typically complex, and many companies are understandably daunted by the challenges they anticipate. As with any transformational project, considerable commitments of time, labor, and budget are required—and with those commitments comes the element of risk. Why organizations drag their feet about upgrading to the cloud Companies considering moving to the cloud have a few common concerns, including the following: Given these challenges, the costs to the organization of upgrading applications to the cloud can remain stubbornly high, and implementation cycles can belong. Why it's worth it Despite these real challenges, upgrading applications to the cloud is well worth the effort and cost. The benefits of delivering applications via the cloud are many, but three stand out. Here's a great example from Oracle CEO Mark Hurd: 95% of cyber attacks are on systems that have had patches available for nine months or longer. Companies' IT departments simply don't have time to install them, or they don't know about them in the first place. On the cloud, cloud providers distribute patches immediately—it's very much to their benefit to do so. And security is much higher on the cloud than most companies can achieve on their own. In fact, the cloud provider takes care of everything underlying the app layer, including all aspects of security, uptime, racks, cabling, switching, and more. If you still have your own data center, you have to deal with all of these things. Thus, upgrading your apps to the cloud can reduce your labor costs significantly over time. Wipro

QuMiC brings automation to cloud upgrades And there's more good news. The powerful new platform is making upgrading to the cloud afar less laborintensive and costly proposition. You'll still save plenty once you're there, but now, thanks to Wipro, you'll save on the cost of getting there, too. Wipro's QuMiC (Quick Migration to the Cloud) automates the migration of configurations and data, and the deployment of code to the cloud, including data validations and reconciliations, making these tasks easier than migrating between data centers. When you upgrade to the cloud with QuMiC, you'll gain greater precision and reliability at a lower cost, helping your company gain business value fast, instead of overspending on cloud implementations. QuMiC works for any industry, and it comes with pre-built integrations for manufacturing, tech, retail, energy and utilities, and communications, along with standardized templates to enable faster rollouts. QuMiC's prebuilt integrations for Oracle ERP systems allow cloning of environments and faster multicountry rollouts, eliminating duplication of effort. For organizations moving to Oracle Cloud, this means faster go-tomarket and improved delivery efficiency at a lower cost. By relying on QuMiC to simplify and streamline processes, you can upgrade to the cloud with confidence and turn your attention—and your investment—to focusing on important business initiatives. What QuMiC means for Oracle onpremises customers QuMiC automation can reduce cost and implementation effort by up to 30%, and its prebuilt integrations ensure faster multicountry rollouts. The result is a stronger ROI for your Oracle Cloud investments and shorter time to market. QuMiC also significantly reduces the risk of error, ensuring delivery efficiency and predictability throughout the entire implementation. Step one: start now Your most important step is the first one. Simply put, the sooner you get started, the better. You can add new capabilities over time, start upgrading your apps and services to the cloud now to start realizing the benefits. Keep in mind that upgrading to the cloud is a journey, not a destination. Oracle and Wipro are here to help you gain the wide-ranging benefits the cloud has to offer, and QuMiC can help simplify the process enormously, so you can upgrade to Oracle Cloud faster. Find out how QuMiC can help your business achieve powerful cloud benefits starting now. Visit our website. [https://www.wipro.com/en-IN/applications/ wipros-qumic/] Industry: Ed Omland Vice President, Strategic Alliances, Oracle Over his 23 years of experience, Ed has been successful in taking new technology to the market, helping companies create strategic competitive advantage through technology. In his current role, Ed owns strategic relationships with major global solution integrators of Oracle, including Wipro. Sankar Venkatraman Vice President & Global Head, Oracle Service Line, Wipro Limited Sankar brings 23+ years of strong expertise and experience in large-scale enterprise IT transformation. His entrepreneurial ability and strong belief in value creation have helped global clients amplify their business success. He is a 'Sloan Fellow' of London Business School - specializing in strategy and leveraging IT for business. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what

should now be included in the modern definition of productivity. www.wipro.com/blogs/taimoor-malik/ ----- Contact Wipro Blogs By Author Considerations for picking an end-point security solution Please fill the required details to access the content Taimoor Malik Taimoor Malik Cybersecurity and Risk Services (CRS) practice lead for Americas at Wipro Taimoor Malik is Cybersecurity and Risk Services (CRS) practice lead for Americas at Wipro where he is responsible for cybersecurity practice development. He also actively participates in client events and meetings to share current state of cybersecurity, industry trends and challenges faced by organizations. His areas of focus are infrastructure security and cybersecurity strategy. Taimoor holds multiple industry certifications along with masters in computer sciences (IIT) and business administration (Chicago Booth). Do you know what end-point protection tools are running on your desktop or laptop? If not, you can hover your mouse over at the quick access task bar and see icon descriptions. ==============

### Considerations for picking an endpoint security solution

---- Arcticle source ---- https://www.wipro.com/blogs/taimoor-malik/ considerations-for-picking-an-end-point-security-solution/ ---- About the Author Contact Wipro Related Blogs Unified digital delivery model for telco service providers Banks need to modernize their data infrastructure Improving performance & scalability of blockchain networks Please fill the required details to access the content Considerations for picking an endpoint security solution June | 2019 Do you know what end-point protection tools are running on your desktop or laptop? If not, you can hover your mouse over at the guick access task bar and see icon descriptions. A more interesting question might be - how is that end-point protection tool helping you and your organization stay secure and compliant. With the advent of technology in all realms, including security solutions, end-point protection tools have also evolved significantly. Typical end-point protection capabilities include anti-virus, malware protection, firewall, Instruction Detection and Preventions Systems (IDS/IPS), vulnerability management and device compliance. More advanced and recent capabilities include application control, data loss prevention, shared policy integration, memory protection along with an integrated central platform. However, not all vendors have evolved their tools equally. This means, the tools that you had installed a while ago and were perfectly reasonable choice at the time, may not be good enough for today's needs. At the same time, there are extensions of related tools from major vendors that can provide same level of protection services as the original software. In many cases, it may make sense to migrate from one end-point solution from a particular vendor to another. However, changing the protection on a large number of devices can cause unrest among the user community. Here are some guidelines that can help manage the initiative in a structured manner. First comes the due diligence around the choice of replacement tool. One factor that we should consider while

evaluating a potential replacement is the quality of the solution. Is it a mature product or something that just came out? We can refer to market research studies, such as Gartner for a quick overview of how the tool stacks up against other choices. Quality, in this context, will also mean performance, ease of deployment, and ease of maintenance and protection capabilities. Compatibility with our existing products is an obvious consideration. If we have a mix of Windows and Mac products then our choice might be different than if we had only Windows environment. Endpoint management, if not done right, can be a major overhead. We should thoroughly evaluate available management platforms and their integration with other security solutions. Ability to clearly view the states of end-points is a valuable metric to use to ensure compliance. Further, having the ability to configure various types of alerts is critical in proactive security measurements. Many end-point management consoles come with pre-built reports that can be customized. Next, we should evaluate how potential replacement stack up against our current footprint, in terms of technologies. Are there existing products that can do a similar job? What is the coverage gap and what is the benefit/effort of covering that gap. Another dimension to consider would be the vendor's presence in our organization. Will it be a net new relationship or is it an existing partnership? While the difference might be trivial for smaller organizations, managing vendor relationships, agreements and licensing can be a significant overhead. Lastly, the cost of the solution should be carefully considered. Many vendors bundle their services and it's not easy to separate out clearly how much end point security will cost. Even, if we can calculate the cost, it may not be possible to get rid of it since it is in the form of a bundled license deal. This forces the organization to go with larger vendors, who may not have the best product, but from a business perspective make more sense since their product is already included in the total licensing vs. a niche player who might have a better product but will increase the overall price. In summary, organizations should start with putting a list of available solutions and vendors together. Next, they should evaluate each of the available solutions based on the maturity of the solution, compatibility, existing footprint and cost of implementation and management and then decide which solution makes most sense to their organization. Industry: Taimoor Malik Cybersecurity and Risk Services (CRS) practice lead for Americas at Wipro Taimoor Malik is Cybersecurity and Risk Services (CRS) practice lead for Americas at Wipro where he is responsible for cybersecurity practice development. He also actively participates in client events and meetings to share current state of cybersecurity, industry trends and challenges faced by organizations. Digitalization and Cloudification are vital to business success and not an option any more. The Telco industry is one of the first to adopt newer technologies. With the advent of digital native customers, banks are facing a paradigm shift in their customer behavior. Performance and scalability of IT systems have always been the key non-functional requirements that are used to gauge the production-readiness of any source ---- https://www.wipro.com/blogs/pankaj-misra/ ---- Contact Wipro Blogs By Author 5 Questions Cyber Insurers Need to Ask About Cyber Insurance Please fill the required details to access the content Pankaj Misra Pankaj Misra Global Head of Insurance Digital & Consulting at Wipro Pankaj has over 25 years of experience in a variety of roles in the Insurance

### 5 Questions Cyber Insurers Need to Ask About Cyber Insurance

----- Arcticle source ----- https://www.wipro.com/blogs/pankaj-misra/ answered-5-questions-about-cyber-insurance-that-an-insurer-needs-to-ask/ ---- About the Author Contact Wipro Related Blogs Data: A Strategic Asset Enabling Value Creation for Insurers All about NIGO (Not In Good Order) Insurance Service Forms What Banks Need to Know About Nordic Cross Border Payments or P27 Please fill the required details to access the content 5 Questions Cyber Insurers Need to Ask About Cyber Insurance June | 2019 Last updated on April 9, 2020. The global cyber insurance market is booming. Fuelled by a demand for standalone cyber insurance policies, the industry is expected to grow to around \$24 billion by 2024, at a compound annual growth rate (CAGR) of 27% between 2018 and 2024. Clearly, there is a need for highly customized and dynamic cyber insurance products for each consumer. Small and medium businesses and even individuals are joining larger enterprises in demanding comprehensive cyber insurance to mitigate risk. Each of these business types have their own cyber risk exposure, and the industry these segments thrive in play an important role in underwriting cyber insurance. Factors like physical location, local regulations, and data privacy laws play an important part in determining which product meets the needs of consumers and remains profitable for the insurer. These five questions can help insurers craft policies and products 1. How do I know I have the right product for my customers? A well-designed comprehensive cyber product should be able to: 2. How do I design a bestselling cyber insurance product? A well-designed cyber insurance product should be comprehensive enough to stand the test of time, and should be able to address the risk exposures of all different industries and geographies in which they are located. The product should have innovative loss prevention tools to educate and potentially prevent a breach; and in the event of breach there should be a dedicated breach resolution team so that insureds receive responsive guidance at every step. Cyber threats are a highly complex, technical, and dynamic issue. Any response must be sophisticated, technically advanced, and constantly evolving. The 'Digital First' approach to designing a cyber insurance product line uses design thinking methodologies to help digitally transform the business and address the unique challenges of the cyber insurance market. This process should be led by an experienced, multidisciplinary team of strategists, designers, cyber security technologists, and cyber underwriters who work with the insurer's product development, marketing, underwriting, and service teams, as well

as insureds to (re)design an entirely new experience. A good cyber insurance product must be highly contextualized to the needs of consumers and offer varying degrees of cyber protection. It should be offered as a bundle with flexible pricing options to make it attractive, affordable and reliable. While cyber insurance can reimburse the costs an affected consumer pays to respond to a cyber-incident (including litigation fees and damages, and reimbursing revenues lost or expenses incurred due to a disruption related to cyber incident), the key lies in preventing that scenario in the first place. Often, a cyber-protection bundle offering a continuous threat surface and vulnerability assessment, targeted threat intelligence from dark and deep web, cognitive detection and on-demand consultative remediation support and advisory services serves as a solid add-on. An automated cognitive technology-enabled solution that respects the privacy of the insured, along with an option of a comforting human touchpoint makes a cyber insurance product holistic and attractive to consumers. 3. What are the key success factors of cyber insurance? 4. How do I augment my underwriting expertise? Cyber Bots can be leveraged to perform nonintrusive assessments, and can gravitate to intrusive assessment depending upon the size of the risk to be covered. AI/ML techniques to proactively assess and predict cyber risk using data from both structured and unstructured sources is crucial. Not only must the technical data be analyzed and assessed, data from security governance reports, annual reports, and vendor contracts can be used to construct a model to uncover hidden risks associated in processes and controls, even assess third/fourth party risks. If you use an industry product or a solution to construct your risk model and scoring, it's vital to consider whether it is fully transparent to the underwriter. Every insurer has its own business strategy, risk appetite, procedures, and controls to be considered while using the risk model and scoring. If the commercially provided model is not fully transparent and hides the parameters into recommending a decision, it would be better to assign a lower weightage, and should allow configuration of the model parameters to suit your company's risk appetite. 5. How can I be continuously vigilant and profitable? The innate nature of cyber risk continuously evolves. The risk posture of a cyber insurance-covered entity can adversely change any time after the policy has been issued. This puts both the insurer and insured at a significant disadvantage and can have serious repercussions on their business and profitability. A good cyber insurance policy should offer post-contract risk monitoring, assessment, and on-demand remediation should the scores fall below a certain threshold. This will encourage responsible behaviour from both the insurer and insured. If the risk posture increases, the insurer can increase the premium to cover the additional risk and make the insured aware so that he/she can take mitigatory measures. If the risk posture decreases, the insurer can offer discounted premiums and earn customer loyalty. Reference 1 - https:// insurancenewsnet.com/oarticle/cyber-insurance-market-growing-at-a-cagrof-around-27-between-2018-and-2024 Industry: Pankaj Misra Global Head of Insurance Digital & Consulting at Wipro Pankaj has over 25 years of experience in a variety of roles in the Insurance industry and is a strategic advisor to CXOs in ensuring successful Digital First insurance journeys. The insurance industry has tradionally relied on data sources such as claims history to underwrite known and measurable risk. When a customer uploads an outdated version of forms or ones with missing signatures, the agents

experience an interrupted workflow because they have to re-evaluate these forms for the accuracy of the seeded information. While P27 is expected to bring many efficiencies to the payments system in the Nordic region, participating banks will need to take deliberate steps to prepare for this new www.wipro.com/blogs/anil-jacob/ ---- Contact Wipro Blogs By Author Fan Engagement as a Platform - How to win the digital transformation game Please fill the required details to access the content Anil Jacob Anil Jacob Consumer BU, Wipro Limited Anil Jacob leads the New Age, Media and Education consulting team at Wipro. He currently focuses on media-related digital product channel and platform development, digital marketing, predictive analytics in product development, legacy modernization and automation in various media sub-sectors. Anil holds a bachelor's degree in computer engineering and has 20 years' experience in the IT services industry. Fan engagement may have started off as a means to engage fans before, during and after a game, as an always-on means of connect between the club and the fans =============

## Fan Engagement as a Platform - How to win the digital transformation game

----- Arcticle source ----- https://www.wipro.com/blogs/anil-jacob/fanengagement-as-a-platform-how-to-win-the-digital-transformation-game/ -----About the Author Contact Wipro Related Blogs What Digital Transformation Means for Higher Education in 2019 Trust in the Times of Fake News Please fill the required details to access the content Fan Engagement as a Platform - How to win the digital transformation game July | 2019 End in sight for the TV era? The last couple of decades have seen a phenomenal rise in TV rights revenue of professional sports bodies and clubs [1], so much so that 2018 was the year when media rights overtook gate receipts as the chief revenue generator in sports. Sponsorship and merchandizing came in as 3rd and 4th largest revenue sources [2], which in turn were influenced by the media exposure generated by the sport / club / players. Live sports captures maximum audience for TV networks, almost 50% of the top-watched programs in Nielsen reports are sports broadcasts including 7 out of the top-10 in USA 2018 list. With TV broadcasters and distributors dependent on sports to keep ratings up, can sports bodies be relaxed about the media rights revenue stream? The information published by television rating companies suggest otherwise. TV viewership ratings of live sports broadcasts have been trending downwards in last few years; the trend is evident whether we look at the sports league with biggest annual TV revenue, i.e. the NFL or guadrennial showcases like the Olympics. NFL 2017 viewership was down 17% from 2015 [3], while Winter Olympics opening ceremony in 2018 was down 11% in comparison to 2014 [4]. This steady unravelling of live sports TV has multiple underlying reasons ranging from consumers watching less hours of live sports on TV (and indeed less of cable/pay TV in general) to the rise of streaming platforms as well as ad-free

highlights packages. Currently TV sports sponsorship is bucking the trend on viewership, rising 5% annually in 2018 [5]. However, with audience migrating, eventually advertisers will shift and networks will be unable to sustain the spend on media rights. The digital transformation game "There isn't another industry that is being so fundamentally transformed with data and digital technology like sport" stated Satya Nadella at a Microsoft Ignite conference a few years ago. He was speaking on stage with Real Madrid FC CEO, jointly announcing a platform for 450 million Madrid fans worldwide [6], which makes it a global social network in its own right. While having a large online following is a great start, monetizing the same is easier said than done, as internet companies would vouch. The tenets of the digital game are wider than replacing depleting TV or stadium audience with digital and social ones. Cable and Pay TV have brought lots of money into sports. Having said that, it has also alienated the uninitiated fan by limiting viewership, and far less people are watching and playing traditional sports now. This trend coupled with competition from online entertainment options, rise of e-sports and increased outdoor lifestyles means that every traditional sport has to look at its long-term health among millennials, generation Z as well as moms and dads in gen X. True digital transformation encompasses all four revenue streams in sports - media rights, gate revenues, sponsorship and merchandizing - and is about making the experience as convenient and intuitive as in the popular digital economy platforms for all stakeholders. State of play The sports and entertainment industry is unique in that it has 'fans' as customers and 'fan engagement' as its core business long before customer experience management became a beacon for the wider world. Pioneers in the industry are acknowledged for vertical integration of sports venues, teams / franchises, ticketing and media distribution. Also noteworthy are forays into creating multipurpose venues, digital direct to consumer media as well as e-sports. Impact of quantum jumps in mass communication technologies is not new - each of which from wirephoto to live broadcast to cable and internet has had a deep impact on sport entertainment consumption - and the sports authorities and franchises which best resonate the technology zeitgeist often turn out to be winners in the race for consumer attention. However, digital is more of a quantum jump in communication capabilities and succeeding in the new playing field requires adoption of a platform approach to sport [7] Platform to win This section covers the key blocks of the proposed digital sports platform. At its core, it's a fan engagement framework which enables sports bodies (as well as their media and sponsorship partners) to discover new fans and know the existing ones better, deliver engaging emotional experiences to fans at the right time on the right device, all the while increasing retention and consumption and driving up monetization possibilities in a secure environment. Fan engagement may have started off as a means to engage fans before, during and after a game, as an always-on means of connect between the club and the fans. What had started as an 'app' is slowly and surely evolving into a platform, one that can define the future of the club and even the sport it represents, by connecting fans, players, sponsors, broadcasters and other service providers. Sports bodies and clubs that are successful in creating and evolving successful fan engagement platforms will end up winners in the digital era Reference [1] https:// globalsportmatters.com/business/2019/03/07/tv-is-biggest-driver-in-globalsport-league-revenue/ [2] https://www.pwc.ch/en/publications/

2018/2017%20Sports%20Outlook FINAL.pdf [3] https://www.espn.in/nfl/ story//id/21960086/nfl-television-ratings-97-percent-2017-regular-season [4] https://www.adweek.com/tv-video/nbcs-2018-winter-olympics-openingceremony-coverage-is-down-from-2014/[5] https://www.warc.com/ newsandopinion/news/sponsorship grows despite roi concerns/41083 [6] https://www.geekwire.com/2015/real-madrid-ceo-on-how-technology-andmicrosoft-are-transforming-our-soccer-club/ [7] https://www.zdnet.com/ article/sport-isnt-just-for-spectators-its-a-platform/ Industry: Anil Jacob Consumer BU, Wipro Limited Anil Jacob leads the New Age, Media and Education consulting team at Wipro. He currently focuses on media-related digital product channel and platform development, digital marketing, predictive analytics in product development, legacy modernization and automation in various media sub-sectors. Anil holds a bachelor's degree in computer engineering and has 20 years' experience in the IT services industry. Digital transformation" is the buzzword floating around business today. It has many definitions and means different things to different people. While there is no cure for cognitive bias, there are thankfully many ways in which technology can help in the identification and verification of fake news. ----- Arcticle source ----- https://www.wipro.com/blogs/rajasekar-murugan/ -----Contact Wipro Blogs By Author Consolidation in the BI industry: What it means for the users Please fill the required details to access the content Rajasekar Murugan Rajasekar Murugan Senior Specialist - Decision Sciences Practice of Data, Analytics & AI, Wipro Rajasekar has over 10 years of experience in Business Intelligence, Analytics and Business Analysis. At Wipro, he is presently sharing his expertise with an American multinational investment bank and financial services corporation as a BI architect. You can reach Rajasekar at Rajasekar.Murugan@wipro.com Mergers and acquisitionshave become guite the norm in the age of uncertainties as it opens up new opportunities like diversification, and control over new markets and technologies

### Consolidation in the BI industry: What it means

----- Arcticle source ----- https://www.wipro.com/blogs/rajasekar-murugan/consolidation-in-the-bi-industry-what-it-means-for-the-users/ ----- About the Author Contact Wipro Related Blogs AI Driving 5G Innovations for Communications Service Providers Making ML Models in Banking Resilient using Adversarial Attacks Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Please fill the required details to access the content Consolidation in the BI industry: What it means for the users July | 2019 Mergers and acquisitions have become quite the norm in the age of uncertainties as it opens up new opportunities like diversification, and control over new markets and technologies. Lately, Cloud and Business Intelligence or analytics have come up as a major force behind merger and acquisition (M&A) activities. In a short time, it has seen about five M&A deals: Salesforce's Tableau acquisition, Google's Looker

acquisition, Logi Analytics' Zoomdata acquisition, Sisense's merger with Periscope Data, and ClearStory Data acquisition by Alteryx. So, why is Cloud and Business Intelligence (BI) integration making the buzz? Data continues to get generated at an unprecedented rate as more businesses undergo digital transformation to respond better to the rapidly-changing industry demands. Cloud-and-BI-specific M&As reinforce the fact that big players are getting future-ready through Cloud analytics and multi-Cloud analytics strategy. The swift rise in the movement of the analytics workload to Cloud necessitates Cloud providers like AWS, Azure, and Google to discover ways of devising better data management and governance to provide real value to customers. Cloud meets Business Intelligence Cloud computing and Business Intelligence are made for each other. Focal point of Business Intelligence is all about facilitating the right information to the right people at the right time, and Cloud computing enables agile way of accessing BI applications with no worries of infrastructure management and maintenance. By enabling access on multiple devices and web browsers, Cloud removes traditional software barriers such as the requirement to have a thick client. How will Cloud-BI-related M&As impact BI World? Large organizations invest in expensive BI software and highly skilled IT talent to set up and maintain an effective BI application. Small and mid-sized companies settle for the tools that fit their budget. Cloud services, along with the advantage of scalability and reliability, permit companies to pay only for the resources used, and eradicates software upgrade overhead, which the Cloud service provider handles. Considering the above, clearly, these M&As related to BI and Cloud integration will have high magnitude of impact on small and medium-sized businesses. Outsourcing of BI infrastructure would bring them resources that only larger enterprises had access to previously. This will also enable businesses to spend time and money on efforts that matter (data analytics), rather than on infrastructure maintenance. Additionally, these M&As will inspire many small/mid-sized organizations to shift their BI delivery from on premise to Software-as-a-Service (SaaS). As small organizations do not have large on premise legacy databases, they can more easily connect their data sources with Cloud-based BI software. This will pave the way for small and mid-sized businesses to run faster and win in the BI adoption race. Artificial Intelligence (AI) is evolving as a game-changing driver of Business Intelligence and analytics; however, as per leading analysts the journey is expected to take time (about 3 to 5 years). These M&As bring in the good news that things are accelerating, and industries are getting ready faster than expected. They show that the big tech players recognize the shift to automation and are getting in early to purchase the capability that will propel their products into the future. Almost all BI product companies are working on enabling ML/AI technologies. Gartner says, by 2020, natural-language generation and artificial intelligence will be a standard feature of 90% of modern business intelligence platforms 1. These M&As and Cloud integration would pay the way for this. More importantly, these M&As would enable Cloud providers to derive direct revenue from data analytics services. In a nutshell, the integration of Cloud and BI will be a game changer for the Business Intelligence space. Reference 1 - Gartner, Inc., "Magic Quadrant for Analytics and Business Intelligence Platforms," by Cindi Howson, Rita L. Sallam, James Laurence Richardson, Joao Tapadinhas, Carlie J. Idoine, Alys Woodward, 26 February 2018. Industry: Rajasekar Murugan Senior

Specialist - Decision Sciences Practice of Data, Analytics & AI, Wipro Rajasekar has over 10 years of experience in Business Intelligence, Analytics and Business Analysis. At Wipro, he is presently sharing his expertise with an American multinational investment bank and financial services corporation as a BI architect. You can reach Rajasekar at Rajasekar.Murugan@wipro.com 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. www.wipro.com/blogs/alisdair-cook/ ----- Contact Wipro Blogs By Author Changing your business architecture Can Information Management Systems contribute to incidents? Haystacks, needles and unlocking business value Accelerating access to legacy data Please fill the required details to access the content Alisdair Cook Alisdair Cook Managing Consultant Alisdair Cook is a Managing Consultant with over 18 years' experience in Information Management in the Oil & Gas Industry. He has extensive expertise in Operations and Projects data requirements, taxonomy, cleanse and migration. Alisdair leads Wipro's Information Management consultants in Europe, the Middle East and Africa. He also manages Wipro's large-scale IM program delivery. Alisdair can be reached at: Alisdair.cook3@wipro.com How many of us spend hours of our day performing manual tasks, knowing that our time would be better spent elsewhere? Data interrogation, deduplication, and optical character recognition is the starting point to enabling identification of metadata. Oil and gas companies are realizing that there is valuable information hidden in their unstructured data assets A key area of focus is on driving new growth by tapping critical legacy data from 

### Haystacks, needles and unlocking business value

---- Arcticle source ---- https://www.wipro.com/blogs/alisdair-cook/haystacks-needles-and-unlocking-business-value/ ---- About the Author Contact Wipro Please fill the required details to access the content Haystacks, needles and unlocking business value October | 2018 Have you ever needed to locate an important document in a vast group of files, but could not find it? Companies in many industries are realizing that there is valuable information hidden in their unstructured data assets of paper documents and electronic files. Energy companies may have previously-inaccessible oil and gas reserves that are now accessible due to improved methods for

extracting oil and gas from fields in the energy industry. Asset-intensive businesses typically have complex, aging plant machinery. Maintaining or modifying machinery systems often requires that employees access information stored in paper-based design documents. Achieving your business value means finding the needles in the haystack. Metadata can be defined as data that describes other data. However, there are many metadata challenges that companies face today: Many companies lack the information management standards, processes or procedural guidance to know how to address these challenges. But, with the right course of action, companies can unlock the value (needles) in previously inaccessible metadata and documents (haystacks). Key steps for releasing value are as follows: Step 1 - Define: Define the metadata requirements. There isn't one steadfast rule for this. Metadata can have many forms and can be located within many areas. For example, in the oil and gas industry, those might be fields, basins, geological provinces, keywords or system attributes. In addition to the company, third parties may use or need the metadata contracting companies, vendors, fabricators and partners. The important thing is that good metadata gives an end user confidence that the origin, history, and integrity of each attribute comes from a reliable source. Step 2 -Assign: As organizations embrace the cloud to become fully digital, they must migrate their previously-unstructured assets to new accessible formats, and assign the metadata defined above. This brings its own complexities with data sources that are enormous, aging and growing each year. This all may sound daunting. But there are new techniques for scanning, digitization, artificial intelligence, extraction, verification, loading, de-duplication, metadata assignment and handover which open the door to searchable and accessible information at one's fingertips. The result? The ability to extract rich and searchable data from previously inaccessible repositories can transform the way a company operates. It can mean increased: Alisdair Cook Managing Consultant Alisdair Cook is a Managing Consultant with over 18 years' experience in Information Management in the Oil & Gas Industry. He has extensive expertise in Operations and Projects data requirements, taxonomy, cleanse and migration. Alisdair leads Wipro's Information Management consultants in Europe, the Middle East and Africa. He also manages Wipro's large-scale IM program delivery. Alisdair can be reached at: Alisdair.cook3@wipro.com

### Accelerating access to legacy data

---- Arcticle source ---- https://www.wipro.com/blogs/alisdair-cook/accelerating-access-to-legacy-data/ ---- About the Author Contact Wipro Please fill the required details to access the content Accelerating access to legacy data October | 2018 Today's oil and gas industry has changed drastically as a result of the 2015+ oil slump. The price of oil has declined more than 50% which has had a global impact on operators, oilfield services companies, and other contractors and vendors. Operators have adopted a leaner approach, investing only in operating enhancements that are the most critical. A key area of focus is on driving new growth by tapping critical legacy data from older assets. Why is unlocking the value of legacy

data important? Legacy data is mostly 'out of sight - out of mind'. We all know we have it, but we don't know the exact volume, or the exact value of the data. For some companies, legacy data may store seismic surveys that reveal areas of rich oil and gas reserves. For other companies the value may be in the role legacy data can play in informing decisions about plant-related enhancements or maintenance. For too long we have squirreled data into unstructured folders or exported it to external storage sites. Locating it can be challenging. To further complicate the situation, the storage of legacy data -offsite - in hard or soft copies or retained on an unstructured drive can have significant cost implications and schedule impacts. It may take employees days to find a piece of information that is critical to a key decision. Because of this, project dates and deadlines may be missed, causing problematic delays. Companies are realizing there may be significant value hidden in their archives, but there is no value in retaining legacy data that is inaccessible. When a company digitizes and organizes data that was previously paper-based or stored in an unstructured format, they can enable rapid access to new decision support. What is an asset-rich, data-heavy company to do? Businesses are finding that with an organized set of techniques and artificial intelligence, the journey to emptying those warehouses and old drives and harnessing data previously inaccessible is not as troublesome as it may seem. Parallel processing is applied to the digitization of large volumes of documents, along with techniques like image correction, digital and perceptual hashing, key calculations and optical character recognition. Advanced imaging routines are used to ensure images are captured effectively. Sophisticated image and text deduplication efforts are added to standard deduplication methods. Once files are digitized they must be accessible, so the complexities of metadata extraction, cleansing and mapping are required to release the true value of previously inaccessible data. Methods include tailored extractions, fuzzy logic and specialized matching. The key is to ensure that an approach adapts to a company's business complexities, learns from nuances in their business rules and recognizes patterns.. In some cases, this can be performed at a net-zero cost by eliminating paper storage costs. But companies are finding that significant value emerges when decision support that was once locked away is now quickly available and close at hand. Alisdair Cook Managing Consultant Alisdair Cook is a Managing Consultant with over 18 years' experience in Information Management in the Oil & Gas Industry. He has extensive expertise in Operations and Projects data requirements, taxonomy, cleanse and migration. Alisdair leads Wipro's Information Management consultants in Europe, the Middle East and Africa. He also manages Wipro's large-scale IM program delivery. Alisdair can be reached at: Alisdair.cook3@wipro.com ===============

# Can Information Management Systems

#### contribute to incidents?

----- Arcticle source ----- https://www.wipro.com/blogs/alisdair-cook/caninformation-management-systems-contribute-to-incidents/ ---- About the Author Contact Wipro Please fill the required details to access the content Can Information Management Systems contribute to incidents? October | 2018 Working in the oil and gas sector for the past 15 years, I can safely say that I have used my fair share of information management systems. Over the years I have utilized systems that have been created and maintained inhouse, and systems that were acquired 'off the shelf'. The competition for the next best system is vast, and the value of an information management system is based on the benefit to the business needs and wants, and - let's not forget - the cost impact. How do you determine the value of an Information Management system? Information management system functionality and attribution can be capitalized upon to capture the what, where, why, when, and how of the information's related metadata. Maximising this use of management systems enables one to capture, maintain and search for valuable information by utilizing critical metadata. Users must be able to search systems with ease and locate critical information without having to open and cross-examine documentation. Managing legacy information management systems What was once a state of the art system can become a hindrance. As organizations evolve, legacy systems can become obsolete and out of date. Inconsistent metadata management can lead to additional expense and lost opportunities with the addition of manhour loss while users spend hours interrogating systems trying to locate critical information. Users become reluctant to utilize untrustworthy legacy information systems which often contributes towards the exploitation of personal drives to store information, thus impacting the integrity of 'true source' information. Bypassing information management systems impacts the health and safety of personnel, increasing the likelihood of accidents. The risk Organizations recognise the risk and safety impacts of not identifying, capturing, populating and maintaining critical metadata within systems. After all a system is only as good as its functionality and accessible metadata. When both are combined it makes a system user friendly and efficient. And with proper data governance it will be trustworthy and accurate. One client shared that it took them 4 months to find all the correct information when it should have taken a maximum of 4 hours. Scenarios like this occur on a regular basis and can have major health, safety, and cost repercussions during performing activities such as: 21st century digitization Digitization is vastly becoming an integral cog to the oil and gas machine. Data interrogation, deduplication, and optical character recognition is just the starting point to enabling identification of critical metadata. Once identified, metadata needs to be extracted and accessible, thus resolving some of the many issues we currently face today,

such as: It is essential that companies carefully consider the value to their organization, of locating and utilizing accurate true source information, rapidly. Alisdair Cook Managing Consultant Alisdair Cook is a Managing Consultant with over 18 years' experience in Information Management in the Oil & Gas Industry. He has extensive expertise in Operations and Projects data requirements, taxonomy, cleanse and migration. Alisdair leads Wipro's Information Management consultants in Europe, the Middle East and Africa. He also manages Wipro's large-scale IM program delivery. Alisdair can be reached at: Alisdair.cook3@wipro.com

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### Changing your business architecture

----- Arcticle source ----- https://www.wipro.com/blogs/alisdair-cook/changingyour-business-architecture/ ---- About the Author Contact Wipro Please fill the required details to access the content Changing your business architecture November | 2018 How many of us spend hours of our day performing manual tasks, knowing that our time would be better spent elsewhere? Companies, grow and adapt throughout the life of any given development or project, which can have a significant impact on contractual agreements with contractors, vendors and 3rd parties. When company changes occur, the contract can remain stagnant, thus creating more manual effort tasks internally if external parties cannot adhere to new requirements. In the beginning Large companies are typically built through a series of projects. Those projects involve information generated by the company, their contractors and other third parties. All of this generates vast amounts of documentation and data, and over time, a company may deal with hundreds of thousands of paper and electronic documents contained within both unstructured and structured environments such as development designs, contracts, specifications, drawings ,etc. Each document is accompanied by critical metadata which describes the what-where-whenhow-why of the related material. For example, when companies hire other companies to help them grow, a contract will often be created to outline the scope of work. The contract may include expectations, roles, schedules, procedures and specifications for ensuring alignment and mitigating risk, with that contract becoming the foundation for delivery. The challenge Complications arise when a growing company needs to make changes to documentation, related metadata or system requirements. When hundreds of thousands of documents are produced over time, this is where the manual effort comes in, if a company's contractual change requirements cannot be accommodated. Hours may be spent manually locating, extracting, capturing and sharing information. While it may feel like time well spent, it's also time spent away from other critical duties, which will have a long-term impact on resources and schedule. Digitizing for long-term efficiencies Luckily, advanced data wrangling technologies are freeing people's time for more meaningful efforts. Structured and unstructured files and data can be evaluated with rapid automated metadata extraction from files using artificial intelligence, while protecting and retaining the integrity of data

and files during significant change, thus allowing an organization's valuable resources to focus on critical daily duties. Data wrangling software and processes need to be tailored to ensure that the accuracy, consistency and reliability of all files and data is uncompromised. Once content is organized, a company can maintain a streamlined approach to a global taxonomy for managing their organization, as opposed to maintaining disparate and disconnected repositories of information. The advantages are clear: If future agreements, designs or other parameters in a business need to be changed at any point, it is efficient to do so using the company's streamlined approach. Alisdair Cook Managing Consultant Alisdair Cook is a Managing Consultant with over 18 years' experience in Information Management in the Oil & Gas Industry. He has extensive expertise in Operations and Projects data requirements, taxonomy, cleanse and migration. Alisdair leads Wipro's Information Management consultants in Europe, the Middle East and Africa. He also manages Wipro's large-scale IM program delivery. Alisdair can be reached at: Alisdair.cook3@wipro.com

## Transformation to achieve Industry 4.0 with Oracle Cloud

----- Arcticle source ----- https://www.wipro.com/blogs/siva-subramanian/ transformation-to-achieve-industry-4-with-oracle-cloud/ ----- About the Author Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Transformation to achieve Industry 4.0 with Oracle Cloud July | 2019 The term Industry 4.0 refers to a significant shift in the way industrial processes are organized to result in higher operating efficiencies and better customer experiences. The shift is powered by the rapid maturation of digital technologies and their ability to be applied to the mainstream industrial processes. The earlier eras of Industrial advancement were powered by revolutions in Mechanical engineering in the 19th century, then by Electrical engineering in the early 20th century and then followed by Electronics & Information technology in the 1970s. The Industry 4.0 era will be powered by the convergence of Industrial Internet of Things (IIOT), Big Data and Integrated Data networks that link up everything. There is a set of additional technologies like Blockchain, Robotics, Multi-purpose Machines and Augmented Reality, each of which could provide an additional boost in

the journey to Industry 4.0. How it is relevant to MFG: For Manufacturing Companies, the implications of Industry 4.0 are profound. The technologies underpinning Industry 4.0 are expected to give three broad benefit areas for Manufacturers. Oracle is a key provider of Enterprise applications and Cloud platforms. Oracle's Enterprise applications are used by thousands of Manufacturers to manage Supply chain business processes, Manufacturing planning and execution processes, as well as Equipment servicing and Depot repair logistics processes. These processes span from the customer touchpoint all the way to the back end operations. Oracle's IOT Cloud platform helps to collect the data from IIOT sensors and channel them into Oracle's Enterprise applications. Oracle's IOT Cloud platform provides strong Visualized monitoring of supply chains, production lines, and asset maintenance, and also has inbuilt Machine Learning capabilities that can analyze data patterns and alert in advance of any imminent breakdowns. In this way, Manufacturers can leverage Oracle's Cloud Platform and Enterprise applications to accelerate their march into the Industry 4.0 era. Industry: Siva Subramanian General Manager & Head of Strategy & Digital, Oracle Practice Siva brings 20+ years of experience in building Applications Practices and Solutions and helping clients drive better business outcomes with Enterprise Applications. He holds an MBA from the Indian Institute of Management, Bangalore. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of https://www.wipro.com/blogs/kartik-subodh-ballal/ ---- Contact Wipro Blogs By Author The emergence of a new Corporate Training paradigm Please fill the required details to access the content Kartik Subodh Ballal Corporate training is one of the most important aspects of any corporate strategy.

# The emergence of a new Corporate Training paradigm

---- Arcticle source ---- https://www.wipro.com/blogs/kartik-subodh-ballal/the-emergence-of-a-new-corporate-training-paradigm/ ---- About the Authors Contact Wipro Related Blogs Connectivity and Interoperability: Realizing the Full Potential of Comprehensive IoT Solutions Is Salesforce Right for My Nonprofit Organization? Beyond the Pandemic: Key Priorities for Agility and Growth Please fill the required details to access the content The emergence of a new Corporate Training paradigm July | 2019 Corporate training is one of the most important aspects of any corporate strategy. According to researchandmarkets1, corporate training market in the US is expected to grow at a CAGR of around 10% during 2018-2022. Forbes2 estimates the market size for corporate training industry to be over \$130 billion in the

year 2017-2018. With new technology advancements in the areas of Augmented Reality (AR), Virtual Reality (VR), Mixed Reality (MR), Machine learning and Artificial Intelligence (AI), and so on, the training industry is transforming at an accelerated pace. Technology has great potential to address some of the challenges for all the stakeholders associated with corporate training. With wide adoption of mobile devices, technical advancement in the form of head mounted displays (HMD) and multi-sensory inputs processing capabilities, new age training is going beyond physical classroom training to virtual trainings, accessible anytime-anywhereanyhow. Challenges For a successful corporate training program that involves various functions, such as sales, operations, service, etc. distractions should be minimum to ensure a better learning rate. As maintaining focus on incoming stream of information is always a big challenge, training should be immersive to avoid monotony and boredom. In this highly-connected world, it would be difficult and expensive for global organizations to provide classroom trainings. The complexity of sharing knowledge at optimum investment with field staff or on-floor staff, spread across various geographies and remote locations without affecting the normal operations is a serious drawback of classroom trainings. For example, for an organization launching a new product, using traditional training techniques for sales and services executives spread across the globe will involve many logistic challenges as it would mean providing new products to all the locations or making all these executives travel to a central place to attend the training program. Below are some of the challenges for various stakeholders associated with corporate training: Proposed Solution - Digital Trainer A Digital Trainer can disrupt the conventional training ecosystem by shifting from "instructional learning" to "experience learning". It is an intelligent and adaptive learning platform where different training modules can be configured through pre-built content libraries. Let us look at some of the features that a Digital Trainer should possess from the perspectives of trainees and trainers. Trainee: Trainer: Benefits of Digital Trainer Below are some of the benefits of Digital Trainer solution. Incorporating new technologies in training programs can allow organizations to move beyond basic skill development to employee performance improvement. For learners, technology can help improve outcomes by adding context, relevance and personalization to the learning experience. For instance, AI can predict whether you will get your next assessment question right, based on your behavior, cognition and engagement. Industries need to act sooner than later if they wish to disrupt their models and don't want to be left behind. Reference: Industry: Vijav Garg He is the Technology Practice Head for Human Machine Interface (HMI) practice at CTO, Wipro. He has over 20 years of experience in dealing with CXO level clients across Fortune 100 organizations and expertise in technology innovation, digital transformation and customer experience enhancement. His responsibilities include practice development, pre-sales, digital transformation, and strategy & planning. To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. Salesforce offers an incredible range of functionalities, making it difficult to find.... A report from Forrester predicts up to 20% of Fortune 500 companies will not make it through 2021 intact. "[For] some, their assets will be dissolved or purchased; others will just go out of business." One possible cause of this is a lack of strategy when

investing in and utilizing technology. "The pandemic revealed the flaws in many companies' technology...and their tech leaders were found mired in Band-Aids like tech modernization, simplification, and consolidation." www.wipro.com/blogs/raghavan-polali/ ---- Contact Wipro Blogs By Author The time is ripe for citizen integration Please fill the required details to access the content Raghavan Polali Raghavan Polali Senior Architect, Wipro Limited. Raghavan has over 15 years of experience in enterprise integration. He has delivered integration solutions for platform digitization programs, modernized mobile apps from legacy to Android, and offered consultation services to clients on their cloud strategy. He has led various roles and has helped clients around the globe including emerging markets in their digital journey. Have you come across business users who had a feasible business use case, but could not realize it due to time and budget constraints? Adoption of citizen integration will empower business users and help the 

## The Time is Ripe for Citizen Integration

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departments. Business users with the help of these tools can create applications, which can perform quick prototyping, analysis, stakeholder demos, reporting, and pilots for potential business use cases. The increasing adoption of zero-code tools adds to the convenience of business users while realizing the use cases into end-user applications. These zero-code tools exist not only in end-user applications like CRM systems, but also in middleware integration platforms. This helps a citizen developer to not only create an application and gather insightful data, but also to collect data from mobile applications and integrate it back into the systems, providing an omni-channel experience for customers. Have you come across business users who had a feasible business use case, but could not realize it due to time and budget constraints? Adoption of citizen integration will empower business users and help the enterprise innovate faster. Industry: Raghavan Polali Senior Architect, Wipro Limited. Raghavan has over 15 years of experience in enterprise integration. He has delivered integration solutions for platform digitization programs, modernized mobile apps from legacy to Android, and offered consultation services to clients on their cloud strategy. He has led various roles and has helped clients around the globe including emerging markets in their digital journey. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern source ----- https://www.wipro.com/blogs/praveen-kumar-kollarkandi/ -----Contact Wipro Blogs By Author ITOT Convergence- A Catalyst for Business Transformation Please fill the required details to access the content Praveen Kumar Kollarkandi Praveen Kumar Kollarkandi Head, IoT Integration, Wipro Limited Praveen has been in the IT services industry for over 20 years and led large digital transformation engagements for clients in the area of application, B2B, hybrid and IoT integrations, and application modernization. In his current role, Praveen is responsible for providing advisory, CoE setup & product implementation services for Fortune 100 customers across industry verticals. Systems and processes related to IT and OT need to work in tandem as part of the strategy to reap the real 

# ITOT Convergence- A Catalyst for Business Transformation

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Modern Definition of Developer Productivity Please fill the required details to access the content ITOT Convergence- A Catalyst for Business Transformation July | 2019 With the emergence of the Internet of Things (IoT), device connectivity has become one of the key aspects for enterprises to offer better customer convenience and operational efficiency. But what makes device connectivity create personalization either to a machine or an end customer? The answer lies in the emergence of the way Information Technology(IT) and Operational Technology (OT) are converging. IT comprises of computers, networking and storage devices that are datacentric and OT on the other hand monitors and controls physical devices typically associated with industrial topographies. In a stand-alone OT environment that is usually proprietary and machine-based, the scope of utilizing the customer/machine or process data available in hand is limited. This can result in cases of higher maintenance costs, customer dissatisfaction, longer delivery times, etc. With the convergence of IT and OT systems, one can realize the power of data as we can now play around with it and provide metrics and visualizations that can create new capabilities such as preventive and predictive maintenance. Some of the key challenges an enterprise may face while trying to implement a successful ITOT strategy include the efficiency with which data is managed without compromising on security, data standards, and interoperability. The very fact that OT systems are majorly legacy and are not network demands them to be sensor-enabled in order to communicate with the IT systems. Many of these OT systems are not designed to be remotely connected and are managed locally, which opens them up to the risk of sabotage when connected online. Ensuring the best of the breed, cybersecurity solutions and adopting Industry standards like ISO 27001 would help in addressing and managing the associated information risk. Depending upon the volume of data coming from the industrial environments, it makes prudent sense to filter, at the device edge gateway, the data to be processed into the IT environment for computing. This will reduce the operational data overload on the system and improve its performance. This applies more to those systems that ask for very low latency. Industrial IoT is an area in which ITOT convergence is helping shape up with use cases like fleet management, asset maintenance (including Predictive maintenance), Deriving efficiency in Manufacturing, quality monitoring, smart metering and connected vehicles being addressed through best-in-class IoT solutions. However, the people, systems, and processes related to IT and OT need to work in tandem as part of the strategy to reap the real benefits of IT/OT convergence. This might be difficult initially with the two functions handling IT and OT working in silos and being resistant to change. A governance mechanism in place to oversee IT/OT projects right from inception to execution will go a long way in helping an enterprise stay competent to address the ever-changing industry and customer needs. Industry: Praveen Kumar Kollarkandi Head, IoT Integration, Wipro Limited Praveen has been in the IT services industry for over 20 years and led large digital transformation engagements for clients in the area of application, B2B, hybrid and IoT integrations, and application modernization. In his current role, Praveen is responsible for providing advisory, CoE setup & product implementation services for Fortune 100 customers across industry verticals. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets,

smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern source ----- https://www.wipro.com/blogs/abhijit-pattnaik/ ----- Contact Wipro Blogs By Author Is this the end of BI? Please fill the required details to access the content Abhijit Pattnaik Abhijit Pattnaik Manager, Decision Sciences, Data Analytics & AI, Wipro Abhijit has about 10 years of experience in the space of Business Intelligence across multiple tools. He works with global clients, providing expert consultation on their BI roadmap, self-service BI strategy, and adoption strategies. He is passionate about data and BI and loves to share his views on the current BI industry trends and their implications through thought papers. Amidst all the buzz in the space of business intelligence with acquisitions, consolidations and the likes, analytics is definitely taking a new direction.

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#### Is this the end of BI?

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stable situation and thus BI might still hang in there for a while. To conclude So in essence, BI, as we know it, is definitely on the chopping block. But it will stay relevant as long as digital revolution is changing business processes and as long as we are inventing new modes of serving data to consumers. It was MIS, it is BI and it will be insights, but the essence, will live on. Industry: Abhijit Pattnaik Manager, Decision Sciences, Data Analytics & AI, Wipro. Abhijit has about 10 years of experience in the space of Business Intelligence across multiple tools. He works with global clients, providing expert consultation on their BI roadmap, self-service BI strategy and adoption strategies. He is passionate about data and BI and loves to share his views on the current BI industry trends and their implications through thought papers. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force.

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## Digital Transformation and Increasing the Odds of Success

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Socrates defined the change many thousand years ago as: "The secret of the change is to focus all of your energy, not on fighting the old, but on building the new." Going digital requires a shift in mindset and behavior. Simply put, knowing your strengths, capabilities and weaknesses in meeting your customer needs and experience, are key for choosing the right digital strategy. It can be pivotal for your success or failure in the digital transformation journey. A straightforward concept but still not easy to execute. The widespread adoption of digital technologies across all industries has gone beyond the hype and is now mainstream and a reality with a global scale. The confluence of digital technologies has created so called connected digital ecosystems that have made their way into the fabric of our daily lives and our economy as well. The net effect is a digital economy beneficial for all parties, enterprises as well as people, who are the end consumers of the digital services. Digital advancements have changed the meaning and usage of time, physical space we live and work in, content of interest, as well as the meaning and use of information in a scale that new behaviour, needs and expectations have arisen across both enterprises and customers alike. Customers not only want their new needs to be served but also have an influence on when, what, how, and where. Digital technologies have enabled people, enterprises and markets to meet, share and collaborate in real-time through new business models and new ways of working. Massive changes in customer behaviour equally demand huge changes from enterprises and organisations to accommodate digital savvy customers' needs and expectations. In this regard, some enterprises have been successful with disruption to produce that digital effect craved by their customers, and other enterprises totally failed in their digital transformation journey. Both successful and unsuccessful enterprises in digital transformation have access to the same digital technologies but they are getting different results. This indicates that a shiny technology or an app added to a complex IT landscape where business is still conducted in an oldfashioned way is not enough. The successful companies with digital disruptors' mindset do not adopt technologies to do old things in new ways. They internalize technologies so that they can find new things to do, and this is what makes them successful. Digital becomes embedded in the organisation's DNA. Another observation made here is that individual technologies, on their own, are no guarantee of results or success. It is the confluence of technologies put in the right business context, with laser focus on customer needs that will yield results and create digital disruption. Deloitte, in their survey for 2019 trends\* confirms this as follows: Macro technology forces at work - Instead of exploring major technology trends individually, organizations will explore how technologies can work symbiotically to drive transformational business change. Using the confluence of digital technologies, digital disruptors build a digital bridge into their products and services so that they can constantly influence and refresh customer experience even with very dull products and services. Nike is a very good example of how they enhanced the customer experience of their main product that is training shoes and built the digital bridge to it. The latest digital product from Nike is "Nike Adapt BB" smart shoes aimed for basketball players and senses the tension needed by the foot and adjusts the shoes accordingly to keep the foot snug. Basically, they elevated the customer experience for athletes and got rid of shoelaces. Adopting a digital disruptor mindset will require a shift in thinking and behaviour and re-

evaluating the approach for the new problem statement. The new problem statement is not about our ability or capacity to create a product or offer a service, as we know we can, but rather our ability to understand the new customer needs and behaviour in light of digital disruptions happening in our industry and whether we can offer the new customer experience that our competitors coming in the shape of small companies and start-ups, with minimum infrastructure cost and capital investment but offering better products and services than us. Organizations that have understood their current capabilities, weaknesses and strengths, and their customer needs and experience before embarking on their digital transformation journeys, will have a better chance to navigate through the ocean of possibilities created by digital technologies. The questions that you need to answer in preparation for this journey are: Have you re-evaluated your vision to see where you stand in the digital ecosystem? What is your new role in the digital ecosystem? What are your strengths and capabilities to meet digital disruption? What is your starting point for the transformation journey? How do you measure your digital impact? How do you know the chosen digital strategy is the right one for you etc? Digital disruption will be as vital and crucial to your business in the coming century as railways, highways, and airways were to businesses in the last century. In summary, know your strengths and capabilities, identify your customers' needs, create a heatmap for your current gaps to meet customer needs, and then choose the right digital strategy that can fulfill your vision, which should be about simply meeting customer needs and providing the experience they are craving for. References: https://www2.deloitte.com/content/dam/Deloitte/br/ Documents/technology/DI TechTrends2019.pdf Industry: Murteza Salemi Partner and Head of AED Consulting Practice - Europe, Wipro Limited. Murteza Salemi has over 22 years of experience working across Enterpriselevel Architecture and Strategic Digital Transformations, defining and enabling digital strategies, digital transformation roadmaps, strategic baselining for digital transformation journeys and digital architecture solutions and governance. Murteza has successfully architected and led multi-hundred million digital transformation programs in Financial Services and other industry verticals. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets. smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern source ---- https://www.wipro.com/blogs/ryan-anderson/ ---- Contact Wipro Blogs By Author Why enterprise transformations fail: It comes down to one thing Please fill the required details to access the content Ryan Anderson Ryan Anderson Partner, Digital Transformation Consulting Practice, Wipro Limited Ryan Anderson is a former Googler, and co-founded Accenture Digital's Customer Experience practice, experiencing the scale of growing from 300 employees to 35,000. His work has won awards in Digital Innovation & Strategy, and influences how Fortune 1000 companies leverage technology. Get in touch: global.consulting@wipro.com When I look back at my first startup, it's clear that we had zero clue what we were doing.

### Why enterprise transformations fail:

#### It comes down to one thing

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investments are directed. The savvy operatives will apply Han Solo's advice so that they not only go faster but go faster where it counts. There are tools and accelerators that can help businesses improve speed to market and drive transformative ways of working. To understand how these tools can help overcome friction, let's look at those five areas again - this time through the lens of solutions: 1. Understanding the right ideas to focus on transformation efforts and investment What if you could rapidly crowdsource inputs from the people who know your business the most? They can be your employees, partners, and customers. 2. Organizing skilled teams and project plan for the necessary outcomes What if you could deploy team expertise on-demand within a structured delivery system? 3. Identify skill gaps in employees and align training to support new ideas What if you could deploy a personalized learning system to accelerate employee knowledge and application of digital skills? 4. Measuring, tracking, and guiding projects enabling transformation ideas What if you could use digital assets and accelerators that will enable an agile-centered way of delivering products enabling management, business, IT, and design for mutual visibility and alignment? 5. Distribute project outputs, promote adoption, and measure results for an effective feedback loop What if you could deploy a solution that leverages artificial intelligence (AI) and machine learning (ML) to drive user adoption of digital products through real-time data analytics, AI, and digital marketing techniques? In future posts, we'll explore the areas of opportunity for Fortune 500s to execute on. No time to waste! Reference 1 https://www.techrepublic.com/article/report-digital-transformationspending-to-hit-1-7t-by-2019/ Industry: Ryan Anderson Partner, Digital Transformation Consulting Practice, Wipro Limited Ryan Anderson is a former Googler, and co-founded Accenture Digital's Customer Experience practice, experiencing the scale of growing from 300 employees to 35,000. His work has won awards in Digital Innovation & Strategy and influences how Fortune 1000 companies leverage technology. Get in touch: global.consulting@wipro.com The insurance industry has tradionally relied on data sources such as claims history to underwrite known and measurable risk. In the early stages of the pandemic, the sudden shift to remote work triggered a flood of cybersecurity threats. Of the nearly 200 organizations surveyed in Wipro's upcoming State of Cybersecurity Report 2020, the majority (70%) report challenges maintaining endpoint security. Phishing scams spiked; 73% of organizations cite them as their top security threat. Not all companies were born digital, but they must now adapt to the digital demands of our world's current situation. As the wave of COVID-19 traverses across the world, business resilience has emerged as a strategic www.wipro.com/blogs/habin-poothattayil/ ---- Contact Wipro Blogs By Author Microgateways: 'Lightweight' is the new normal for digital success Please fill the required details to access the content Habin Poothattavil Habin Poothattayil Senior Consultant, Wipro Limited Habin has more than 12 years of experience in architecture, design, and implementation of several ESB products, microservices and API management tools. In his current role, Habin is responsible for building integration solutions and modernizing enterprise applications for global clients. With enterprises adopting the API-first approach as part of their digital journey, APIs have taken center stage of every organizational initiative and have become an 

### Microgateways: 'Lightweight' is the new normal

#### for digital success

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scaling per application are the top priorities. The second way is the Side car Proxy pattern where a Microgateway is deployed alongside a parent application on the same machine. This is specifically useful when we need fine-grained control over machine resources and would like to limit for a particular resource. Microgateways are powerful and have a crucial role to play in any API program with regards to managing security and governance while saving that extra license cost. Do you think enterprises are ready for this paradigm shift? Industry: Habin Poothattayil Senior Consultant, Wipro Limited Habin has more than 12 years of experience in architecture, design and implementation of several ESB products, microservices and API management tools. In his current role, Habin is responsible for building integration solutions and modernizing enterprise applications for global clients. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to reexamine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity. www.wipro.com/blogs/rohit-jain/ ---- Contact Wipro Blogs By Author B2B Integration and API Integration - A partnership to look out for Please fill the required details to access the content Rohit Jain Rohit Jain Manager, Wipro Ltd Rohit has been with the IT services industry for over 12 years with expertise in application and B2B integration architecture, hybrid integration and integration product evaluation projects. He is leading large digital transformation engagements helping clients modernize their integration landscape. Moving to digital is no more a choice but an obligation for organizations. ================

# **B2B Integration and API Integration - A partnership**

#### to look out for

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of dimensions - API, B2B, A2A, and hybrid integration to name a few. API is not new in the market. Its origin dates back to the late 1990s but with limited usage and significance. Over the years, API has evolved as a generic interface to connect remote applications. However, API-led integration is now gaining traction with the proliferation of API polyglot technologies. Similarly, the journey of B2B integration started back in the early 1970s but its significance never wavered. If anything, it kept evolving by taking new shapes and forms. The API integration is enabling seamless business operations between an enterprise and its end partner/s with capabilities promising enough to complement the modern B2B integration landscape. Key Pillars of modern B2B integration include trading partner management, monitoring, and dashboard, deployment and security, multi-network integration and connectivity for trading partners. Though the capabilities of API and B2B integration are seemingly serving the same purpose, there is a stark difference between the two: Setting up an environment with wellcoordinated and integrated EDI and API systems offers the best of both the worlds. API's collaborating with B2B is a great opportunity, which will underpin the integration landscape by driving innovation in terms of trading partners outreach through mobile or web channels. APIs can increase the agility of the B2B platform by de-coupling and exposing sub-processes such as monitoring and reporting, acknowledgments, status check, exposing key functions, trading partner onboarding, for consumption by external applications. All these extended B2B processes can be used through mobile channels leading to operational intelligence and quick actionable insights. Today, most of the leading B2B and upcoming product vendors have started to embed API management capabilities in their products. Both the technologies may have different roots but share a common purpose to empower integration and transform the B2B landscape. With new technologies evolving, the B2B Integration landscape will surely continue to evolve by adding capabilities around hybrid cloud integration, insight to action from transactions, cognitive intelligence, and blockchain integration. Industry: Rohit Jain Manager, Wipro Ltd Rohit has been with the IT services industry for over 12 years with expertise in application and B2B integration architecture, hybrid integration and integration product evaluation projects. He is leading large digital transformation engagements helping clients modernize their integration landscape. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern source ----- https://www.wipro.com/blogs/vinutha-bn/ ----- Contact Wipro Blogs By Author AI isn't perfect - Misclassification is still a barrier to adoption Please fill the required details to access the content Vinutha BN Vinutha BN CTO AI research Vinutha heads CTO AI research and has 25 + years of industry experience. She is a firm believer that AI needs to be governed and controlled to ensure that it always in 'assist Human mode'. Artificial intelligence (AI) is poised to revolutionize everything by bringing in an era of intelligent machines. =================

## AI isn't perfect - Misclassification is still a barrier to adoption

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that the percentage of neurons that get activated for a right classification are generally 100% and for during misclassification is generally lesser than 75 %, indicating a fuzziness or confusion and this can be alerted. have you dealt with AI misclassifications? What are your thoughts on the way forward? Discuss with me @ Vinutha BN (CTO Office) Industry: Vinutha BN CTO AI research Vinutha heads CTO AI research and has 25 + years of industry experience. She is a firm believer that AI needs to be governed and controlled to ensure that it always in 'assist Human mode' To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. Salesforce offers an incredible range of functionalities, making it difficult to find.... A report from Forrester predicts up to 20% of Fortune 500 companies will not make it through 2021 intact. "[For] some, their assets will be dissolved or purchased; others will just go out of business." One possible cause of this is a lack of strategy when investing in and utilizing technology. "The pandemic revealed the flaws in many companies' technology...and their tech leaders were found mired in Band-Aids like tech modernization, simplification, and consolidation." www.wipro.com/blogs/magesh-kasthuri/ ---- Contact Wipro Blogs By Author Please fill the required details to access the content Magesh Kasthuri Magesh Kasthuri Senior Member - Distinguished Member of Technical Staff, Wipro Technologies Magesh Kasthuri is an Enterprise Architect in BFSI Domain handling Swiss Universal Banking customers in Wipro and a Senior Member in Distinguished Member of Technical Staff in Wipro Technologies. He is an Azure Certified Architect, AWS Certified Associate Architect and IBM Certified Bigdata Architect. He is also doing his Ph.D in Neural networks and Genetic algorithms. You may reach him at magesh.kasthuri@wipro.com ========== Arcticle source ---- https://www.wipro.com/blogs/surendra-singh-naruka/ -----Contact Wipro Blogs By Author Improved EDI visibility with blockchain Please fill the required details to access the content Surendra Singh Naruka Surendra Singh Naruka Practice Manager, Wipro Limited Surendra has over 17 years of experience in technical consulting, solution architecture & design, project management, development and implementation in the area of B2Bi cloud integration. He is also involved in delivery of mission-critical cloud-hosted integration solutions that handle large volumes of complex data and transactions using industry-leading B2B integration/ managed file transfer products. Being a centralized, third-party network with the ability to accurately track and record data, it can be the right choice to have a blockchain-complemented B2B system and add more reliability, efficiency and credibility between the partners. ==============

### Improved EDI visibility with blockchain

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Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Improved EDI visibility with blockchain August | 2019 Is blockchain just a buzzword making the rounds across industries, or is it a reality? In the process of arriving at the right conclusion, many industries have spent time and effort in studying the feasibility of its adoption. The primary motive for enterprises to adopt blockchain is the bouquet of features it brings to the table, like traceability, transparency, consensus, smart contracts, distributed ledgers, cryptography, and immutability. Technology evolution in the integration space with APIs, WebServices, advanced communication protocols, encryption capabilities, etc., are pushing the B2B integration landscape to evolve from enabling just electronic Data Interchange (EDI) data transformation to providing security and visibility capabilities as well for trading partners. This resonates in the case of the supply chain, which is one of the earliest business functions to adopt traditional EDI. Currently, most EDI products offer visibility as part of its base feature. However, the need of the hour is: a. Visibility of real-time transaction details and actionable insights b. Ease of building a track and trace framework within every enterprise c. Better credibility of an enterprise's EDI reports (For e.g.transaction status, reconciliation, success rate, partner utilization, volume metric reports) among its trading partners Can blockchain bring the above capabilities in an EDI supply chain system? Transactions through EDI (typically involving a buyer, a seller, 3PLs, vendors, others) hinge upon oneway, point-to-point communication, meaning that two out of the three parties can exchange messages with one another but the third party is left out. Since blockchain is a shared ledger, all parties can view the transactions in real-time, putting a brake to disputes or repudiation around the transactions. This ensures "a single pane of glass" view for all users making information sharing more efficient and secure. Being a centralized, thirdparty network with the ability to accurately track and record data, it can be the right choice to have a blockchain-complemented B2B system and add more reliability, efficiency and credibility between the partners. Industry: Surendra Singh Naruka Practice Manager, Wipro Limited Surendra has over 17 years of experience in technical consulting, solution architecture & design, project management, development and implementation in the area of B2Bi cloud integration. He is also involved in delivery of mission-critical cloud-hosted integration solutions that handle large volumes of complex data and transactions using industry-leading B2B integration/ managed file transfer products. Ramya Rengamannar Project Manager, Wipro Limited Ramya has over 15 years of experience in B2B / EDI modernization, solution architecture, product comparison, and strategy around B2B integration. She has managed integration competency centre, EDI transformation, and led managed services engagements for global clients. She was instrumental in setting up and supporting Wipro's cloudbased B2BaaS solution. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate

### Factors that affect test environment effort estimation

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server restart request might be faster to complete as opposed to a complex application deployment. Moreover, deployment times for each application could also vary. For environment provisioning, there are multiple parameters to consider ranging from infrastructure, middleware and applications, thereby making it the most complex factor to estimate. Environment provisioning becomes even more complex due to the multi-layered configurations, to be handled by one team. Environment monitoring efforts are estimated based on the tools used, parameters to be monitored and frequency/ time interval for monitoring. As for reports, we have to consider the tool used, number of reports, frequency and parameters, which are not complex to estimate. These remain the key parameters governing the effort estimation for test environment management. Industry: Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

===========================----- Arcticle source ----- https:// www.wipro.com/blogs/shantha-bai/ ----- Contact Wipro Blogs By Author Smart Sales - Futuristic way of selling Please fill the required details to access the content Shantha Bai Shantha Bai Solutions & Innovation Head - Microsoft Practice - Wipro Shantha has over 19 years of experience in Solutions, IP & Innovation on Microsoft Applications. She specializes in architecting enterprise digital solutions in the area of Conversational AI, Automation and Mixed reality. She focuses on technologies such as Azure, Cognitive Services, Dynamics 365, Office 365, HoloLens, IoT and Blockchain. Over the years, we have transitioned to new-age technologies, giving products and services new avatars.

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# Smart Sales - Futuristic way of selling

----- Arcticle source ----- https://www.wipro.com/blogs/shantha-bai/smart-sales-futuristic-way-of-selling/ ----- About the Authors Contact Wipro Related Blogs Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Run SAP on Google Cloud for Increased Business Efficiency and Growth A Modern Definition of Developer Productivity Please fill the required details to access the content Smart Sales - Futuristic way of selling August | 2019 Figure 1: Conventional Sales Cycle A salesperson is under constant pressure to close as many deals as possible in a day, swamped with numerous non-selling tasks, updating the lead data, planning and following up for upcoming meetings, traveling, service tasks, internal meetings, training, etc. Let us discuss how we can revolutionize the sales process and empower every salesperson to be able to do what is most important for him/her - sell. Simplifying the sales process,

the new-age SmartSales cycle must streamline the conventional steps into very specific and practical stages - Lead Identification, Lead Enrichment, Meeting preparation, Meeting, and Closure with technology becoming the backbone, aiding a salesperson, for good. Figure 2: SmartSales Cycle Figure 3: Relationship between technology and experience lifting the sales cycle With technologies backing the salesperson, his/her efficiency is bound to be optimal. As inferred from the diagram above, integration of experience and technology platforms through a digital core is the essence of this new-age revolution. SmartSales brings together these two platforms to embed technology and simplify selling through deep AI and big data. Elaborating further, in order to experience an automated digital assist, computer vision, voice enablement, digital personas, facial recognition, etc., need to be realized. This is done using the SmartSales modules like interactive modules, chatbot, content management tools, etc., that are created using the technology stack. One can realize in-moment recommendations, business value mapping through rich knowledge management and social listening leveraging LinkedIn connectors and content management tools. These are modern technologies that are easy-to-use. They are provided by market leaders like Microsoft to empower developers and in turn the endusers. To illustrate the nitty gritty of the product/service being sold, SmartSales highlights the usage of IoT and mixed reality to be able to provide a seamless experience through interactive augmented reality. With augmented reality taking centre stage, encompassing its usage to highlight the best of features and to be able to compare with competition real size and real-time will definitely make decision-making easier and guicker. Such offerings collated in one-single piece constitutes what is called SmartSales. SmartSales is a one-of-a-kind solution developed using Microsoft stack, for every enterprise or corporate that sells. So common and yet so critical, it integrates business apps with social media inputs making the information provided to a salesperson fresh and relevant at one-click. With information curated from the CRM platform to facilitate knowledge management, it holistically uplifts the salesperson's work, augmenting his/ her capability and making selling as a process, simple and easy. Industry: Shantha Bai Solutions & Innovation Head - Microsoft Practice - Wipro Shantha has over 19 years of experience in Solutions, IP & Innovation on Microsoft Applications. She specializes in architecting enterprise digital solutions in the area of Conversational AI, Automation and Mixed reality. She focuses on technologies such as Azure, Cognitive Services, Dynamics 365, Office 365, HoloLens, IoT and Blockchain. Avantika Bhargava Consultant - Microsoft Practice - Wipro Avantika is an IIT Kharagpur business graduate, working as Solutions Consultant with Wipro. Her primary focus areas are Innovation, Solutioning and Product Marketing. She owns a total of 4 years of experience from varied verticals of the industry such as IT, Government, Oil & Gas, Food & Beverages, Fertilizer and Manufacturing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern definition of productivity.

## 15 disruptions that add value to your cloud environment

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complex global projects as well as leading SWAT teams to improve and innovate delivery services. He holds cloud architect and project industry certifications and US patents in the area of migration. You can reach Steve at steve.lee@wipro.com In the evolving landscape of digital workplaces, efficient field service operations are critical in ensuring reduced downtime... appy employees usually stay at their jobs, frustrated workers often don't. Chief human resource officers (CHROs) tell us that the corporate leave of absence (LOA) process is one of the most common sources of employee frustration. Employees often rank their LOA experiences low on the satisfaction scale, using descriptors such as complicated, confusing, inconsistent, time consuming, and unresolved. In a world where business is evolving at the speed of thought, rapidly changing market conditions pose several challenges for enterprises across industries.

www.wipro.com/blogs/ramesh-n-g/ ----- Contact Wipro Blogs By Author Wipro and Cisco: Empowering Digital Transformations with Black Belt Academy Some practical thoughts on Wi-Fi 6 Please fill the required details to access the content Ramesh N.G Ramesh N.G Director - Software Defined Networks practice, Cloud & infrastructure services and Distinguished Member of Technical Staff - Senior Member, Wipro Ramesh has 19 years of experience in the field of information technology, network infrastructure and architecture, and technical delivery. He specializes in the field of Software Defined and traditional and cloud networking. With the digital landscape rapidly evolving, organizations need to be constantly reviewing and upgrading the digital experience they offer their customers. This involves investing in technologies and services that promise to keep the business resilient, agile, and cost-effective, while increasing their competitive advantage. Wi-Fi 6 is the next generation Wi-Fi standard, which is also 

### Some practical thoughts on Wi-Fi 6

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### Wipro and Cisco: Empowering Digital Transformations with Black Belt Academy

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technologies and services that promise to keep the business resilient, agile, and cost-effective, while increasing their competitive advantage. Often, organizations struggle to balance all these requirements and lose sight of how to make the most of their investments. Partnerships can help by offering essential support and guidance throughout all aspects of digital transformations. Wipro and Cisco have been partners for twenty-five years. We have helped many of today's leading brands digitalize their business processes and customer experiences. Together, Wipro and Cisco deliver a full stack of digital solutions for multi-cloud, intent-based networks, workplace virtualizations, and end-to-end security and observability. Wipro's dedicated Cisco Business Unit was established to help customers' accelerate their digital transformations through a full stack of industry services underpinned by Cisco technologies, which are delivered at scale through flexible, OPEX-based as-as-service platforms. With years of experience working with customers to address their needs and help them unlock greater business value with IT, Wipro has developed custom IPs and services-orchestration platforms with industry-leading integrations that make IT operations and management really simple for customers. Cisco's open APIs, along with Cisco Devnet and programmability resources for partners, enable us to create innovative solutions that meet our customers' requirements. Recently, Wipro's Cisco professionals helped a global medtech company to complete one of the largest SD-WAN transformations. Read more about the transformation story here. Cisco Black Belt Academy: Catalyzing Wipro's delivery practice Cisco's Black Belt Academy is a comprehensive enablement framework for Cisco architectures and has become foundational training for Wipro employees. Wipro requires delivery teams to complete the Black Belt program to ensure they always adhere to Cisco's best practices. With over 1,000 Cisco Black Belt certifications, Wipro is one of the top Black Belt partners. The structured certification targeting relevant delivery teams and technology towers has enabled Wipro to drive adoption of Cisco Black Belt learning tracks throughout the organization and empower customers to harness the full potential of their Cisco technology stacks. Because the scope of Global med-tech company project was so huge, Aman Pal, a Senior Project Engineer at Wipro, turned to Black Belt for extra support. "As soon as I was on-boarded into the project," he said, "I enrolled myself into Cisco Black Belt's SD-WAN deployment and support learning path." The program helped him better "articulate problem statements and their solutions" to customers, and "vastly helped to prepare HLD & LLD for the project." "Customer experience is at the core of everything we do," said Apurba Dutta, General Manager and Practice Head of Network Practice at Wipro. "Black Belt Academy helps us efficiently deliver our solutions built on Cisco to our customers." Cisco Black Belt Academy has helped Wipro's delivery teams to not only upskill their know-how about the latest developments in Cisco, but also apply their skills to deliver differentiated customer experiences. The Academy represents a powerful addition to Wipro and Cisco's longstanding partnership. With ongoing educational support and skills development, the Academy promises to strengthen the competitive edge of these two industry leaders, and keep them equipped with the expertise necessary to help businesses thrive. Ramesh N.G Director - Software Defined Networks practice, Cloud & infrastructure services and Distinguished Member of Technical Staff - Senior Member, Wipro Ramesh has 19 years of experience in the field of information technology, network

#### Begin with the end in mind

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incorporating AI/ML in various processes, our enterprises can learn to identify, plan and prioritize opportunities, derive insights, and provide appropriate recommendations to help reach the goal in the most efficient manner.AI is supported by continuous learning, which makes it more and more intelligent with experience just like humans. In this way, we gradually move towards a data-centric world transforming the way in which businesses function. Reference 1https://www.linkedin.com/pulse/how-netflixuses-ai-data-conquer-world-mario-gavira 2https://yourstory.com/2019/06/ amazon-fashion-feature-artificial-intelligence-stylesnap 3https:// www.artificialintelligence-news.com/2019/07/09/idc-half-ai-projects-failcompanies/ Industry: 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Machine learning is a widely used tool that assists in decision-making and the automation of processes in commercial sectors and is propelling the financial services industry. Companies are turning to ML use cases in finance for more security, a slicker user experience, faster support and nearly instant gapless processing. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force.

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# Transforming CPQ for the digital age

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Transforming CPQ for the digital age August | 2019 The onset of digitization
is transforming the competitive landscape for enterprises and the way
organizations function. There has been a stark change in customer
expectations and consumer behavior, leading to a significant impact on the
CPQ (Configure Price Quote) process. Traditionally, the CPQ process has
been used to enable sales organizations to automate and optimize the

creation of quotes and capture of orders for prospects. However, with the growth of digitization, CPQ also has to undergo several changes in order to meet the evolving needs of organizations. Price remained a largely ignored factor in traditional CPQ solutions. These systems continued the use of standard price lists with sales representatives, not considering any other factors or context in generating the price lists. This has led to a lack of intelligence in the decision-making process, causing problems such as overdiscounting and volume-driven sales tactics. Modern CPO solutions need to overcome the above challenges and equip selling channels with the best buying experience. They should also deliver the right price to the right customer. Once price optimization has been integrated into the CPQ process, it will open up massive profit opportunities through a faster time-toquote, increased profitability, and an enhanced, specialized customer experience. In order to fulfill all the requirements as stated above, the CPQ solution needs to undergo transformation as a whole. This transformation will not only bring value to the sales process of an organization but also minimize build time and complexity in the early stages of production. It will also help in building intelligent inventory control decisions, resulting in an enhanced supply chain management. In addition, accurate product pricing and configuration will result in lower waste processes. CPQ transformation is not easy. For it to be successful, in addition to deploying a robust solution, organizations must embed a well-defined lead-to-order process across the organization. The following steps need to be executed in order to ensure complete transformation and implementation of the CPQ solution for any organization: As companies continue to grow in the digital space, CPQ transformation and use will help organizations toward quicker Q2C (Quoteto-Cash) enhancing customer experience, improving sales and increasing revenue. All these contribute toward taking organizations one step closer to complete digital transformation. Industry: Avanindra Jha Senior Executive, MAS Avanindra is a part of the strategic marketing team at Wipro and brings with him varied experience of business marketing across a range of geographies and industry domains. He is passionate about the latest technological advances happening across industries and organizations and aims to build expertise in integrating technology with marketing to drive the revenue-marketing engine. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Running your SAP on Google Cloud Platform is cost effective and increases... The IT sector is still struggling with an effective measure for productivity. Companies need to re-examine the true nature of development and what are the ultimate goals. Learn what should now be included in the modern source ----- https://www.wipro.com/blogs/anjan-lahiri/ ----- Contact Wipro Blogs By Author 3 Ways AI Will Improve Utility Customers' Experiences Please fill the required details to access the content Anjan Lahiri Anjan Lahiri Anjan Lahiri has been in the Utilities sector for 2 decades. He has led several industry change implementations in AI, Smart Metering and Renewable Energy and has worked with clients across the Power, Water and Gas Sectors internationally. His current interest areas include federated utility model, asset and data monetization, new revenue services, solar and batteries, virtual power plants, EVs and community solutions. Historically,

#### 3 Ways AI Will Improve Utility

#### **Customers' Experiences**

----- Arcticle source ----- https://www.wipro.com/blogs/anjan-lahiri/3-ways-aiwill-improve-utility-customers-experiences/ ----- About the Author Contact Wipro Related Blogs Transforming Water Data for the Future How Utilities Can Implement an Intelligent Customer Management Transformation Strategy Changing the Future of Australia's Utility Sector through Data and AI Please fill the required details to access the content 3 Ways AI Will Improve Utility Customers' Experiences August | 2019 Historically, the relationship between utility companies and their customers has been lacklustre. Despite the fact that access to utilities is a boon to quality of life, customers see it as a given: Data suggests that customers spend just eight minutes per year interacting with their energy providers digitally and 11 minutes chatting with representatives. In other words, utilities remain out of mind — at least until problems arise. When these issues do occur, providers also have a reputation for following outdated, frustrating, or costly workflow models for offering and implementing solutions. And unfortunately, customer service is also viewed as a cost driver instead of a revenue generator. This means that as utility companies grew larger and more siloed over the years, it became much more difficult for them to provide seamless customer experience. Is it any wonder, then, why 48% of customers think utility companies don't care about lowering costs and that just one-third believe they provide "fair rates and service?" Good news is on the horizon, though: Companies are beginning to leverage design thinking and put customers first. Thanks to the emergence of incredibly convenient services from companies such as Uber, Netflix, and Amazon, today's customers expect more from all companies — including those supplying utilities. They want to personalize their user experience, and for utility providers to intuitively understand their needs. This creates a wonderful opportunity for companies to transform customer connections by leveraging artificial intelligence. Big Data Brings Big Value to Users AI-powered technology plays a role in helping utility companies further understand data and engage with customers. This is true during different segments of the customer journey, from the time customers begin searching for information about a service to when they provide feedback to their utility companies. Because AI can find meaningful patterns in varying data trends, it helps utilities provide users with the messages they need to hear — right when they need to hear them. This marks a significant change from a time when customers could expect little proactivity or personalization from providers. What does this type of AI-augmented customer experience look like in action? On the most basic level, it changes the way customers interact with utility providers. Today,

contact centres can be automated so that customers no longer have to wait for available agents. Instead, users can interact with responder bots programmed to understand query intents and fetch relevant data. These bots can be taught to understand the vocal emotions and urgency of a caller as well as track social channels for solutions. When it comes to AI, 86% of utility companies have already begun to test the waters. Despite this, AI is far more than a speedy way to field inquiries and free up time. It's a means to anticipate — and avoid — other aggravating situations. For example, when customers don't receive bills on time, they become anxious. As they begin to phone the utility company to complain, call volumes increase significantly. AI-enhanced systems learn from these events and can help uncover the underlying obstacle (in this case, the problem might be that software isn't communicating as it should). Armed with this information, AI might recommend a different protocol: It can ensure that meter data is accepted by billing engines without the need for agents to manually check it before bills are sent. By adopting a sense, think, respond, and learn framework, utility companies can enhance customer experience and loyalty. Here, the emphasis should be on combining emerging technologies to offer a personalized, highly convenient experience. When it comes to utility-focused advances in AI, three specific areas are ripe for disruption: billing, personalized solutions, and revenue creation. Here's how each relates to customer experience: 1. Saved costs for customers. Customers never want to be blindsided by higher-than-usual bills. By taking previous data into account, AI can predict when customers' consumption is likely to skyrocket. This makes it possible for customers to take remedial measures or for utility companies to notify customers proactively when abnormal patterns are detected. AI can also arm representatives with relevant data whenever customers inquire about similar issues. Helping customers resolve unexpected billing headaches shows compassion and concern — two attributes any company should aim for. Besides this, AI holds promise in that it can help identify supply quality issues and detect meter problems, all without costly service visits. 2. Improved understanding of customer behavior. Knowing when a customer is likely to call based on past habits, consumption patterns, call records, and payment histories can inform customer service agents far before the call takes place. This predictive information gives agents a chance to either prepare for calls or head them off. Evaluating historical sequences also allows marketers to segment customers and offer individualized plans. This could involve promoting solaror green-based initiatives to the right audience, for example. It could also mean matching individuals to a specific plan that aligns with their usage patterns in order to lower their costs. Utility companies can also try their hand at gamification. Although high utility bills are a matter of concern for customers, gamification helps reduce bills by engaging them and their families through fun activities and simulations. Additionally, AI could prove incredibly helpful when it comes to competition among utility providers. In markets where customers can freely choose among utilities, AI can help predict when they're likely to switch to a different provider — allowing companies to take preventive action. 3. Stronger sales pipelines for crossselling and upselling. With AI in place, utility salespeople and marketing teams can optimize their spend to more effectively target high-value customers. These are the users most likely to want additional utility and non-utility services and products. This ease of identification helps utility

companies move from a digital to a highly intelligent enterprise. Utility providers have long to go before AI becomes truly integrated into their operations. However, that simply means they have more potential to revolutionize the experiences they deliver. Industry: Anjan Lahiri Anjan Lahiri has been in the Utilities sector for 2 decades. He has led several industry change implementations in AI, Smart Metering and Renewable Energy and has worked with clients across the Power, Water and Gas Sectors internationally. His current interest areas include federated utility model, asset and data monetization, new revenue services, solar and batteries, virtual power plants, EVs and community solutions. This event necessitated a review of Australia's capacity Many utilities have grown their customer management, customer information systems (CIS) and billing capabilities around tenured platforms like SAP, Oracle or other mainframebased platforms. As the industry navigates Utilities can now rapidly solve Arcticle source ---- https://www.wipro.com/blogs/mohan-udyavar/ -----Contact Wipro Blogs By Author Wipro launches Automotive Connected Services Studio in collaboration with AWS Launchpad Accelerating the journey to smart healthcare with cloud Please fill the required details to access the content Mohan Udyavar Mohan Udyavar Head - Healthcare & Life sciences Architecture and Cloud practice, Wipro Mohan has 22 years of IT experience. Currently, he is responsible for providing consulting services to the Healthcare & Lifesciences clients in the areas of digital transformation, cloud adoption, application portfolio rationalization, platform architectures and architecture resilience. He is an AWS Certified Solution Architect Professional. We are living in a connected world and customers are looking for a vehicle which will make their travel experience safe, joyful and productive. Customers are also expecting the car features to keep improving with Over the Air (OTA) updates. The need to improve patient experience and health outcomes while keeping healthcare affordable drives the transformation initiatives in the healthcare industry today. ==============

#### Accelerating the journey to smart

#### healthcare with cloud

---- Arcticle source ---- https://www.wipro.com/blogs/mohan-udyavar/accelerating-the-journey-to-smart-healthcare-with-cloud/ ---- About the Author Contact Wipro Related Blogs Cloud Economics: Driving Business Value Through Discipline De-Risking Mainframe Modernization for the Banking Industry The Day After: De-risking Legacy Modernization Please fill the required details to access the content Accelerating the journey to smart healthcare with cloud September | 2019 The article discusses: The need to improve patient experience and health outcomes while keeping healthcare affordable, drives the transformation initiatives in the healthcare industry today. The journey to wellness starts with engaging individuals to play an

active role in managing their health as they manage their financials. There has been an increased adoption of wearables like smart watches or fitness bands supported by telehealth and smart pill to improve the care outcomes and adherence. All these innovations enable the patient to self-manage their health from their homes, removing the friction between them, and the caregiver and reducing the visits to the hospitals. The need for smart health solutions With the digitization of healthcare, there is a need for smart health solutions that can coordinate the patient journey, integrate the Electronic Health Record and provide the patients a single view of the clinical data at their fingertips (Figure 1 depicts an ideal smarthealth solution). Tools like conversational apps will enhance the patient experience by removing the anxiety from selecting the providers and by providing details of estimated expense of a procedure. These algorithmic apps will help the patient select the appropriate therapy in the clinical decision support system, improve adherence, and reduce the R&D costs for new drugs. All the health data collected from the apps can be used for advanced health analytics. The data can be anonymized and voluntarily shared by the individual for research purposes. The individual's health data can be stored in a blockchain-based distributed health ledger where the individual owns the data and authorizes sharing some links with their physicians. Health ledger will also ensure that the data is shared only with authorized healthcare providers and the access can be revoked after use. With the rising concerns about data security, security has to be in the DNA of every solution. Figure 1: Smart health solution leveraging cloud AWS Cloud healthcare AWS Cloud acts as an enabler for healthcare transformations by providing agility, immense scalability and a mechanism to link the infrastructure OpEx spend to health outcomes. AWS IaaS and PaaS services accelerate the development of smart health solutions. In the realm of connected care, AWS IoT solutions help secure, manage, and analyze the data generated by connected care devices. AWS IoT Core securely connects, processes messages, routes them to the business microservices and AWS endpoints. Device Management manages the devices from cradle to grave, which includes setup, software updates, and retirement. AWS Managed Blockchain solution underpins the Health Ledger solution to manage and maintain the blockchain network. It allows seamless integration into a centralized AWS Quantum Ledger Database, which analyzes the data while maintaining the data provenance. AWS Polly can be used to create a conversational Health Assistant app which can interface with the system of records like member eligibility systems and answer entitlement questions. This speech enabled chat bot can be integrated into the social media channels or even as Alexa skills to answer questions related to side effects of a drug. These assistantshelp in increasing prescription adherence and tracking outcomes. Data and analytics have been a cornerstone of digital medicine and enable creation of longitudinal health records, perform risk assessments and predict care outcomes based on vitals, prescription adherence and drug efficacies. AWS S3, EMR, Redshift and SageMaker provide a great platform for big data processing and building Machine Learning models on the data. Securing a smart health solution is extremely important as it handles sensitive Protected Health Information (PHI) data. The smart health platform should have an adaptive security framework that can be built using capabilities from AWS like Device Defender, which audits the IoT configurations, AWS Guard Duty, which enables threat detection, and AWS Macie, which detect anomalies in access

patterns and take proactive actions like locking down the PHI data vault. To conclude The value chains of payer, provider and the pharma industries are intertwined, and the end goal is common 'value-based care'. Cloud is playing the role of a catalyst in bringing rapid innovation to the connected and coordinated care space and improving quality of care for patients.AWS provides an extensive set of PaaS services that significantly cut down the time to market for smart health solutions. Industry: Mohan Udyavar, Head -Healthcare & Lifesciences Architecture and Cloud practice, Wipro Mohan has 22 years of IT experience. Currently, he is responsible for providing consulting services to the Healthcare & Lifesciences clients in the areas of digital transformation, cloud adoption, application portfolio rationalization, platform architectures and architecture resilience. He is an AWS Certified Solution Architect Professional. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business 

### Wipro launches Automotive Connected Services Studio in collaboration with AWS Launchpad

----- Arcticle source ----- https://www.wipro.com/blogs/mohan-udyavar/wipro-launches-automotive-connected-servicess-studio-in-collaboration-with-aws-launchpad/ ----- About the Authors Contact Wipro Related Blogs Partner Automation is Key to Maximizing the Manufacturing Ecosystem Three Ways to Optimize the Supply Chain to Become Customer Centric Five ways manufacturing companies can boost profitability Please fill the required details to access the content Wipro launches Automotive Connected Services Studio in collaboration with AWS Launchpad August | 2020 We are living in a connected world and customers are looking for a vehicle which will make their travel experience safe, joyful and productive. Customers are also expecting the car features to keep improving with Over the Air (OTA) updates. In the JD Power Initial Quality Survey, the OEMs have seen their ranking drop drastically based on the quality of their connected services. So automotive OEMs are now focusing on providing new connected experiences to their customers. To stay competitive the OEMs have to not only incubate

new ideas but also accelerate the time to market, while keeping the costs low. Wipro's Connected Services Studio focuses on experimenting, codesigning, building, and launching value-driven solutions for our automotive customers. The studio has 550+ design professionals, full stack engineers and data scientists with Telematics and IoT implementation experience who follow an agile continuous value delivery model. The studio leverages our Designit® capabilities to design ownership experiences paired with our deep expertise in Product Engineering services building next generation Digital Cockpit, Car OS and ADAS capabilities. The studio builds on the investments made in our Connected Vehicle Platform AutoInsights and creates reusable service components which accelerate the development of new connected experiences for our customer. The platform leverages AWS Connected Vehicle Solutions and has a rich partner ecosystem. AWS Connected Vehicle Solutions is an enabler to quickly standup a Connected Vehicle Platform without committing to a massive infrastructure investment. This platform allows a secure connectivity between the car and the AWS cloud and has a framework to build a rich set of connected services features. Wipro AWS Launchpad has a comprehensive set of solutions that enables our customers to reimagine their AWS cloud journey and accelerates cloud adoption. Leveraging a highly automated and industrialized approach, it enables building modern telematics services, and deployment of a Cloud native DevOps environment. The physical studio also includes immersive customer experience zones, collaboration pods for ideating and developing next-generation solutions with hyper scalers and building futuristic workspaces. Wipro's AWS Launchpad encompasses resources from multiple streams like experience design, cloud infrastructure, microservices development, advanced analytics and machine learning, networking, security etc. that work closely to manage AWS development in a seamless fashion. The studio provides end to end services from research, design, build, launch and operate and has already developed 30+ connected services for our customers. The Connected Service Studio provides the following value for our customers Please reach out to us for more information and we can conduct a design workshop and jointly develop a business case for you. Industry: Mohan Udyavar CTO, Automotive (mohandas.udyavar@wipro.com) Mohan leads the Industry Solutions Group, Architecture and Cloud consulting for the Automotive vertical. Dr. Manish Govil General Manager & Global AWS Practice Head (manish.govil1@wipro.com) He is responsible for driving go-to-market solutions, competency, offerings, center of excellence, and delivery for AWSrelated services globally. Manufacturers were once many steps removed from their customers, with wholesalers and distributors providing a crucial link to sales. With the titanic shift that has occurred in business, only customer-centric companies will survive. Manufacturing companies are under pressure. Cost of raw materials is rising, while increased competition is driving down end user pricing. Salaries are rising at a level that manufacturing automation alone cannot absorb and the race to acquire talent is increasing. This forces manufacturing companies to find other ways source ---- https://www.wipro.com/blogs/renuka-sridhar/ ---- Contact Wipro Blogs By Author The need for small commercial insurance to go big on digital Please fill the required details to access the content Renuka Sridhar Renuka Sridhar, General Manager-Insurance, Wipro Renuka has around 25

#### The need for small commercial

#### insurance to go big on digital

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to enable a radical shift in the small commercial insurance industry by helping insurance carriers offer new and distinctive customer and agent experiences through digital solutions. Automation of processes will help increase the experience of customer/agent while speeding up the process and reducing the cost. This is the cornerstone for any upstream or downstream customer experience transformation. We already see trends like carriers moving to direct channel for small commercial business. However, many still consider broker/agency channel to last a little longer, thereby forcing them to enable this channel as the immediate focus for transformation. Disruptive technologies like machine learning, predictive analytics, straight-through processing, and leveraging of appropriate third party data for information gathering play a large role in the digital transformation journey. These provide a distinctive digital experience supported with upfront risk underwriting, thereby enabling operational efficiencies. A carrier can see guick benefits of this transformation in the form of Industry: Renuka Sridhar, General Manager-Insurance, Wipro Renuka has around 25 years of experience in the Insurance domain. Renuka brings with her expertise on various aspects of life, property& casualty insurance business and technology across various geographies. The insurance industry has tradionally relied on data sources such as claims history to underwrite known and measurable risk. When a customer uploads an outdated version of forms or ones with missing signatures, the agents experience an interrupted workflow because they have to re-evaluate these forms for the accuracy of the seeded information. While P27 is expected to bring many efficiencies to the payments system in the Nordic region, participating banks will need to take deliberate steps to prepare for this new www.wipro.com/blogs/jon-cohen/ ---- Contact Wipro Blogs By Author Your Digital Doctor is here Please fill the required details to access the content Jon Cohen Jon Cohen Global Head, Life Sciences Industry Solutions, Wipro Limited Ion has been a business and technology executive with over 20 years' experience leading consulting competency teams and practices in Life Sciences and Healthcare, focused on delivering industry solutions to clients. He is passionate about bringing end-to-end solutions that address client problems, developing people, cultivating consulting talent and highperforming teams Today's patients see digital technology as an enabler in their journey to wellness - they are always connected, and this has fundamentally changed their expectations and behaviors. Read on to know more how the technology landscape is enabling this revolution in healthcare. =============

#### Your Digital Doctor is here

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have evolved into savvy partners in their own wellness. These changes are causing life sciences and health care companies to totally recalibrate their approach to healthcare products and services. In the digital world, a patient is no longer a passive recipient of care. Technology is re-shaping traditional healthcare relationships: what was once about a doctor caring for a sick patient is now evolving into a journey to wellness. Reports suggest that in 2023, 60% of American patients will have access to their health data using a technology of their own choice. Healthcare's objectives have changed: to ensure that the patient doesn't get sick to begin with. Technology is enabling this shift that allows for interventions early or pre-emptively in the cycle of a disease. Evolution of the digital patient Patients around the world are in a perceptible shift when it comes to their attitude to wellness. Individuals are now ready for a role in their own care. They're going to doctors armed with perspectives on what their disease may be. Today's patients see digital technology as an enabler in their journey to wellness they are always connected, and this has fundamentally changed their expectations and behaviours. They are in control of the healthcare information, not only do they trust online reviews from peers, they are vocal in their digital advocacy of positive experiences. They are quick to gauge intent when it comes to a company taking part in conversations on social media, and are quick to see through inauthentic behaviour. They greatly value the quality of experience when they interact with companies online; this is being shaped by their experiences across all parts of life, not just those involving healthcare. Evolution of Technology Technology has always been a part of the patient's wellness journey. But only now has the technology developed to become pervasive and meaningful. It is now able to handle the volume and velocity of data to contribute to the wellness experience. Here's how technology is disrupting the wellness space and putting the digitally savvy patient at the centre of the journey The time is ripe for healthcare to take the digital step forward. It is estimated that there will be at least 10 leading life science companies that will deploy AI based proofs of concept by 2020! Also, 30% of the top 100 life science companies will use AI to improve patient monitoring during clinical trials. Technology is enabling the wellness journey as it delivers more value and better experiences to patients at each stage. Many entities intersect on the patient wellness journey, each with their own role to play - Providers, Researchers, Drug Developers, Governments and regulatory bodies. If you're a stakeholder in any of these organizations, how do you see technology as an enabler to serve the patient's needs better? We would be keen to hear your views on it. Please write to us at health.sbu@wipro.com Industry: Jon Cohen Global Head, Life Sciences Industry Solutions, Wipro Limited Jon has been a business and technology executive with over 20 years' experience leading consulting competency teams and practices in Life Sciences and Healthcare, focused on delivering industry solutions to clients. He is passionate about bringing end-to-end solutions that address client problems, developing people, cultivating consulting talent and high-performing teams. Let's start with a case study. A mid-sized pharmaceutical company, engaged in packaging artwork management and artwork studio services, did not deploy artwork proofreading system at the artwork studio level, though it had an electronic proofreading system in review and approval stage for the Regulatory Affairs (RA) team. Due to this structure, the approval process to finalize an artwork was long and tedious. Any error introduced by the

artwork studio was picked at the review and approval stage, further adding time to the artwork approval process and increasing the number of versions. Label and artwork management in medical device companies are still seen as an afterthought and therefore, there is not enough concentration as well as investment in this area. However, with new updates such as traceability (UDI) and e-labeling, companies are compelled to invest time and money to be compliant on the regulations required. Roughly 10% of the case-patient Arcticle source ----- https://www.wipro.com/blogs/michael-peck/ ----- Contact Wipro Blogs By Author Changing the face of Wipro's Australian workforce Please fill the required details to access the content Michael Peck Michael Peck Operations & Customer Delivery Head, Australia & New Zealand, Wipro Ltd. He leads the local operational support functions and is accountable for the governance and delivery of all services to our clients in the region. With a focus on the delivery of Transformational Programs over the last 20 years, he has led complex change programs covering Infrastructure, Applications and Business Process Outsource services for numerous clients. Around the world, workforce management has evolved with time and Australia remains no exception to this.

#### Changing the face of

#### Wipro's Australian workforce

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As part of our localisation program we also sought to ensure our ratio of female employees improved. A simple step includes ensuring female applicants are always equally considered for roles across functions and departments. This has enabled a step change in the diversity of our new employees that we hire. Owing to the positive implementations in our Maternity and Paternity policies, our female recruitment has witnessed a good growth, which currently stands at 40% of the total new hires. But diversity is much more than just addressing gender bias issues. It's about broader gender identification, race, ethnicity, physical ability, religion, sexual orientation, and we purposely strive to ensure no one is treated differently for employment opportunities due to their potential diversity. Pay equality Across our various employment grades, Wipro Australia has always stressed upon pay equality. With improvement in paid maternity leave, and positive actions to ensure a mix of candidates are being considered for all recruitments, we are finding the attrition of female employees is now much lower than that of males. Graduate opportunities Over the last year, we have reinvigorated our Graduate program. In the last financial year, Wipro Australia hired 43 new graduates, and our ambition is to hire at least a further 100 this year. The focus is across industries and importantly, on providing training and experience in 'digital' technologies. This encompasses leading CRM solutions, Artificial Intelligence (AI) and Automation, data analytics, cyber security and integration technologies to name a few. Education development Our associations with educational institutions have been stronger than before. Our tie ups with academia have moved from strength to strength. A very good example is our partnership with Swinburne University. Swinburne University of Technology has offered a select cohort of Wipro, an opportunity to experience Swinburne micro units in a cost effective way. Our training incorporates online examinations and accreditation, to align pedagogy to employee's grade and designation at the company, E.g indepth technical, management overview, sales propositions. We have also built Topcoder, Wipro's crowdsourcing technology, which allows community of designers, developers, and data scientists to deliver all things novel and digital. Community involvement Earlier this year Wipro has taken its first steps towards turning good intentions into positive actions, to help build higher trust, lower prejudice, and an increase pride in Aboriginal and Torres Strait Islander cultures by joining the Reconciliation Australia and establishing a Reconciliation Action Plan (RAP). Our first steps on this journey are mapped out for this year and next and will lay the foundations for future RAPs and reconciliation initiatives in the years to come. Like Wipro, our customers are committed to engage with partners who demonstrate a commitment to maximize indigenous participation in the delivery of work, training, employment and businesses. Additionally, for several years, Wipro has undertaken its Spirit of Wipro fun run in cities across Australia. This global event has received mass support and contribution from stakeholders across our ecosystem of partners, clients, employees and students in Australia. Through these initiatives our communities have always connected and resonated strongly with the purpose of giving back. Including our employee volunteering initiatives towards alleviating the drought crisis in New South Wales and partnering with Foodbank, The Good Company, Salvation Army among many others to support under-privileged communities. These initiatives are in line with our vision of becoming an 'employer of choice' to anyone from any

background and a true representative organisation of the Australia society. We already have 25 nationalities working for us in Australia, and this diversity enriches our daily lives and helps to build a new face of Wipro in Australia. Industry: Michael Peck Operations & Customer Delivery Head, Australia & New Zealand, Wipro Ltd. He leads the local operational support functions and is accountable for the governance and delivery of all services to our clients in the region. With a focus on the delivery of Transformational Programs over the last 20 years, he has led complex change programs covering Infrastructure, Applications and Business Process Outsource services for numerous clients. The insurance industry has tradionally relied on data sources such as claims history to underwrite known and measurable risk. In the early stages of the pandemic, the sudden shift to remote work triggered a flood of cybersecurity threats. Of the nearly 200 organizations surveyed in Wipro's upcoming State of Cybersecurity Report 2020, the majority (70%) report challenges maintaining endpoint security. Phishing scams spiked; 73% of organizations cite them as their top security threat. Not all companies were born digital, but they must now adapt to the digital demands of our world's current situation. As the wave of COVID-19 traverses across the world, business resilience has emerged as a strategic www.wipro.com/blogs/kathy-gilbert-oneil/ ---- Contact Wipro Blogs By Author Top 5 common pitfalls when implementing a CPO solution Please fill the required details to access the content Kathy Gilbert-O'Neil Kathy Gilbert-O'Neil Global Practice Director-MAS Consulting | Wipro Limited Kathy brings over 20 years of experience in Consulting and Technology Transformation for Wipro's Modern Applications Consulting Division. She specializes in Consulting, Advisory, and Technology delivery. Kathy is adept at devising future strategy & IT competency roadmap for enterprise transformation with hands-on management style and deep focus on business analysis, solution blueprinting, process modelling, execution planning, and consensus building. Configure, Price, Quote (CPQ) is a technology that helps companies accurately configure, price and quote their products and services more efficiently and with greater accuracy so that their sales teams can focus on the business of selling. ============ Arcticle source ---- https://www.wipro.com/blogs/vijay-pandey/ ---- Contact Wipro Blogs By Author Handling volatile market demands with optimized back-office technology Please fill the required details to access the content Vijay Pandey Vijay Pandey Associate Vice President • iCORE - DOP With 15+ Years of experience in the US Mortgage & Lending Operations, Vijay leads Lending Operations for Wipro and has been instrumental in developing operations and delivery niche services along with customer satisfaction. He excels in Leading large service Delivery Teams, designing, and execution of multidisciplinary transformation project. He also holds an extensive experience of working with Banks and Mortgage Lenders for process strategy, outsourcing, technology, and overall business consulting. Five Back-Office Products to Focus on Moving Forward

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# Handling volatile market demands with optimized back-office technology

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highly regulated, and vulnerable to scandals. While the undulating waves of the pandemic keep diminishing, ongoing expectations for a massive return to the traditional office haven't materialized. ... A study by BCG revealed that organizations that focused on culture were 5x more likely to implement digital transformation successfully than organizations that just neglected www.wipro.com/blogs/rajaraman-mahadevan/ ----- Contact Wipro Blogs By Author Use the tools, but do not lose the knowledge Taking the Pain out of Mainframe Modernization Please fill the required details to access the content Rajaraman Mahadevan Rajaraman Mahadevan Senior Consultant -Legacy Modernization, Wipro (Google certified Cloud Digital Leader) He brings in 25+ years of IT experience with extensive business knowledge of enterprise-wide applications and experience in designing & implementing mission critical applications. He has led successful IT Delivery organizations serving global leaders in Banking & Retail industries. The automated approach can speed up the migration effort significantly—but experience has shown that it can create problems of its own. Companies often find that their automatically migrated applications are very difficult to maintain and manage. The good news is that there is a solution. The answer lies not in more technology, but rather in enhancing the migration process with a new methodology—one that helps ensure that the team managing the target application has the knowledge they need to work efficiently and effectively. A recent survey of U.S. IT professionals found that over half (56%) say their IT infrastructures are mostly comprised of mainframe computers. And 80% said that the mainframe is extremely critical (41%) or very critical (39%) to 

### Taking the Pain out of Mainframe Modernization

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applications and given the unprecedented speed of innovation that's enabled through cloud services, there's never been a better time to start modernizing for agility, scalability, and sustainability. But where do you start and what are the costs? What's the time to migrate and can you have the same or better reliability, security and efficiency that you currently have with your mainframe systems? Legacy modernization is becoming a fundamental business continuity requirement and drivers include both business and IT, making it imperative to focus on both aspects. Application rebuild/rearchitect/re-engineer delivers the highest business value, although with a high-cost timeline requirement. Automated tool-based conversions can migrate legacy applications relatively faster, although loss of knowledge and future maintainability need to be factored in. Rehosting, also called lift and shift, solutions can deliver quick total cost of ownership reduction, however they do not address technical debt, complexity or skills related challenges. Yet, rehosting can be used as part of a "move and improve" strategy, and distributed modernization is gaining momentum. With all of these options, how do you know where to start? Often the first steps in any major transformative effort are the most critical, and that means starting with a comprehensive and thorough assessment. As part of Wipro's mainframe modernization services, our initial assessment helps identify program flows and dependencies while building a functional understanding of the best path forward and most-appropriate tools to ensure modernization success. Companies that have been successful in their guests to modernize tend to share three key characteristics: they've holistically assessed people, process, and technology; they've clearly understood and mitigated potential risks; and they've met early deployment milestones to deliver quick value and pave the way for continued deployment. Wipro helps clients address these issues and more by offering end to end solutions ranging from Business Transformation to Cloud Transformation, including NextGen Application Services for Mainframe Platform which focuses on de-risking the entire modernization journey. A unique differentiator supporting our solutions is Wipro's integrated accelerators platform, ModerniZ, pronounced "modern eye zee", a new modular automation approach that supports end to end legacy modernization and accelerates the transformation journey. ModerniZ includes runtime analysis, UI upgrades, and database modernization to addresses transformation holistically, providing incremental capabilities that greatly reduce modernization risks while meeting key business objectives. Additionally, through ModerniZ, Wipro comes to the table with more than 20+ in-house tools that are ideal for most transformation efforts, however, based on your business goals, budget, and timeframes, we're able to tap into an additional 50+ tools from our extensive partner ecosystem to create a customized, tailored plan for nearly any transformation scenario. With an assessment complete, and Modernization Roadmap in-hand, clients can guickly understand and evaluate modernization options, including pros and cons for each, cost/ benefit analysis, and Wipro's recommendations for best fit and target state. We are excited to share that Wipro has attained the Mainframe Modernization expertise on Google Cloud. This important accreditation validates that our teams have both the technical knowledge and advanced skills required to help clients choosing Google Cloud, to seamlessly navigate through this important and incredibly beneficial journey. Google Cloud offers customers the ability to modernize their mainframe workloads to run

reliably on highly secure infrastructure while minimizing downtime risk. Multi-cloud choice and flexibility of a fully managed No Ops environment frees up operations budgets and the use of 100% renewable energy and zero net carbon emission drives sustainability. Google Cloud's innovations in analytics, ML, and AI allow customers to drive new revenue streams, reduce costs, and surpass customer expectations. Once the project kicks-off our expert consultants are by your side every step of the way. We're incredibly proud of the work we've done helping clients move their legacy systems to Google Cloud. These include a leading provider of financial data and infrastructure that was able to reduce the time to onboard new customers from six months to a few hours, allowing them to compete with more agile competitors, improve their customer experience, and shorten their time to revenue realization. To learn more and gain additional insights into how modernization journeys to Google Cloud with Wipro evolve, we would like to invite you to read a few of our case studies. Given the number of companies that have already taken the leap, there's ample evidence that the benefits of modernization make the effort 100% worthwhile: increased operational efficiency and agility, productivity gains, a reduction in baseline operating cost and business risk, the creation of all new avenues to unlock unique and untapped business opportunities, and so much more. Are you ready to start on a mainframe modernization journey or do you want to know more about what it involves? For more information on ModerniZ, and why Wipro is the ideal partner to help any business take its mainframe systems to the cloud, please click here. Rajaraman Mahadevan Senior Consultant - Legacy Modernization, Wipro (Google certified Cloud Digital Leader) He brings in 25+ years of IT experience with extensive business knowledge of enterprisewide applications and experience in designing & implementing mission critical applications. He has led successful IT Delivery organizations serving global leaders in Banking & Retail industries. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business 

# Use the tools, but do not lose the knowledge

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The Day After: De-risking Legacy Modernization Please fill the required details to access the content Use the tools, but do not lose the knowledge January | 2023 When modernizing legacy systems and moving to the cloud, many companies consider automated tools that guickly convert legacy applications to a modern technology that can be deployed into the cloud (For example: from COBOL to JAVA or .NET). The automated approach can speed up the migration effort significantly—but experience has shown that it can create problems of its own. Companies often find that their automatically migrated applications are very difficult to maintain and manage. The good news is that there is a solution. The answer lies not in more technology, but rather in enhancing the migration process with a new methodology—one that helps ensure that the team managing the target application has the knowledge they need to work efficiently and effectively. The challenges of automated migrations When a migration is performed with an automated tool in an idiomatic conversion, the process typically results in a converted application that is hard to maintain for two fundamental reasons. The first of these is "code bloat." With automated tools, one line of COBOL code can produce an equal number or more lines of JAVA code in the new application. With legacy system applications often having millions of lines of code, this ballooning code can make the new application more complicated to maintain due to its sheer size. The second and perhaps more troubling problem is that the automated process creates an application that no one truly understands. Unlike manually analyzed and written code, it essentially performs a line-by-line transcoding of the legacy application. Thus, automatically generated JAVA or .NET code will imitate the legacy system and behave like COBOL code. As a result, neither the full-stack JAVA or .NET programmers managing the target application or the subject matter experts who managed the legacy application will fully understand the new system. The organization will thus struggle to perform activities such as enhancing the system or fixing defects. This typically means more time and cost in the operation of the application. Overall, the ongoing maintenance challenges with the new application stem from a fundamental gap in the automated migration process. Typically, this process is rigorous, encompassing analysis, planning, mass migration, validation, and parallel production. But it fails to address a key factor—the knowledge about the legacy system accumulated over time. This knowledge includes the way the system was coded, what it does, and the process and workflow problems that have been addressed. Such knowledge provides invaluable context for maintaining the new system—but it is typically "left behind" and lost in current automated migration efforts. Filling in the missing link The solution, of course, is to make sure knowledge is captured and made available to the teams that oversee the new application. Indeed, this is critical, and it cannot be an afterthought or add-on effort. Knowledge migration needs to be built into the automated migration process from the beginning, and regarded as an integral part of the effort, along with language and database migration. This methodology includes several key steps that run throughout the migration journey. Adding these knowledge-migration steps to the modernization process will undoubtedly add a modest amount of time to the overall project. But in the long run, it will help eliminate significant maintenance costs—and pay off in reduced risk, greater efficiency, and an improved ability to have systems keep pace with the demands of the business. In our work with modernization efforts, Wipro has found that

today's automated migration solutions, such as Google's G4 mainframe code conversion software, can be powerful tools. Like any tool, however, their effectiveness depends on how they're used. With our long experience in IT modernization across a variety of technologies, and our proven methodologies, Wipro can help companies leverage these tools while preserving critical knowledge. By taking the right approach, companies can make the most of their migrations to take their applications—and the business—where they need to go. Rajaraman Mahadevan Senior Consultant - Legacy Modernization, Wipro (Google certified Cloud Digital Leader) He brings in 25+ years of IT experience with extensive business knowledge of enterprise-wide applications and experience in designing & implementing mission critical applications. He has led successful IT Delivery organizations serving global leaders in Banking & Retail industries. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business benefits that come with them. ========= Arcticle source ---- https://www.wipro.com/blogs/dean-fairchild/ ---- Related Articles Contact Wipro Please fill the required details to access the content 

### Transforming the leave-of-absence experience into an employeeretention tool

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Transforming the leave-of-absence experience into an employee-retention
tool September | 2022 Happy employees usually stay at their jobs, frustrated
workers often don't. Chief human resource officers (CHROs) tell us that the
corporate leave of absence (LOA) process is one of the most common
sources of employee frustration. Employees often rank their LOA
experiences low on the satisfaction scale, using descriptors such as
complicated, confusing, inconsistent, time consuming, and unresolved. As
unlikely as it may seem, the LOA construct presents a unique opportunity for

companies to flip the script, taking one of the most-complained-about processes and turning it into an employee Net Promoter Score (eNPS) booster. Why LOA has traditionally been a four-letter word "At a time when organizations can ill afford to watch any employees walk out the door, experts say inattention to HR technology integration and failing to ensure that both HR staff and line managers are well-educated about the intricacies of leave policies can have an outsized impact on employee retention and company performance." ~Dave Zielinski, SHRM.org1 If you're a CHRO or HR director, you know all too well the problems with the typical LOA process. It's complicated, inconsistent, and impersonal. For everyone. One CHRO describes the LOA process as a huge distraction and time-consuming effort for HR departments. "We do babies well, but after that our policies fall off. Currently, employee requests for mental-health and elder-care leaves are among our fastest growing LOA categories." But few HR systems are equipped to manage either the scale or complexity of the disparate workflows associated with each, which can leave HR staff misperceived as the source of the problems. While most HR teams can boast abundant expertise in managing leaves of absence for the birth of a child, few would call themselves experts in each of today's broad-ranging leave categories. But ready or not, they're required to manage all of the mandatory leaves defined by federal, state, or local law, as well as the voluntary ones offered at the discretion of employers. Taken together, there can be dozens of options to process: parental leaves, bereavement, military, sabbatical, jurytime-off, medical, paid and unpaid, COVID-recovery leaves, and on and on, each with its own set of governing corporate policies and compliance regulations. Employers must ensure adherence to an increasingly confusing matrix of international, federal, state, and local laws. Even standards for the U.S. Department of Labor Family and Medical Leave Act (FMLA), for example, can vary from state to state. Even when HR managers expediently deliver necessary information to all corporate stakeholders, siloed IT systems can make the LOA process fragmented and hard to update On the other side, employees increasingly feel the stress of this complex process. Even when HR managers communicate benefits to workers, many forget where to access the information or remain overwhelmed and uncertain about the entitlements of each leave category: how many weeks can they take, will they continue to be paid and if so, at what rate, will their benefits still apply, what happens if their plans change, who do they notify before they come back to work, etc. The LOA process too often worsens the anxiety of an employee already stressed by an LOA-triggering situation or life event. CHROs understand well the need for a seamless, personalized LOA experience that meets the needs of both businesses and their employees. The reality, given the limitations of legacy HR technology, is that a worker's LOA request more typically creates a web of chaos and frustration. The solution: A consistent and personalized LOA experience The solution is a consistent and personalized LOA experience—one that serves employees across their entire hire-to-retire journeys. The process should be easy, automated, intuitive, and familiar for employees to use for all types of leave. At the same time, the experience should be automatically personalized for the employee's location, language, or other special requirements. Wipro, utilizing the ServiceNow Now Platform®, is successfully helping companies eliminate the chaos and change the entire tone and tenor of the LOA process within an organization—transforming it into a positive, employee-supportive

tool. Wipro provides pre-built employee journeys for all types of leaves while leveraging the cross-department integration and automation of the Now Platform. Building on standard plug-ins, such as ServiceNow HR Service Delivery workflows, for example, we enable personalization of content to create an employee experience that's simple, accessible from wherever the employee is working, and customized for specialized industry, geographical, or language requirements. When your employees in Seattle initiate FMLA requests, you don't have to worry that they're going to see a New York application—personalized content automatically takes them through the requirements and entitlements specific to their state. Higher eNPS scores, employee retention, protected investment "The cost of not doing these things is far greater than the cost of doing them. CHROs need to focus on the talent continuum—hire to retire, and all the experiences in between. Without a thoughtful EX [employee experience] roadmap, employees won't thrive and the organization may experience greater attrition, which is very costly." ~Shane Driggers, Vice President of Global Talent Acquisition and acting CHRO at ServiceNow2 The Now Platform is the engagement layer for your employees, connecting them to your various systems of record, simplifying management of the LOA process while ensuring essential integration of HR, IT, legal, and other stakeholders. For your workers, Wipro LOA pre-built journeys present a unified experience that shields employees from the confusing (and changing) details of all the various types of leaves they may request during their career and across the entire hire-to-retire timeline. Wipro can simplify mobile access and automatically pre-populate forms with otherwise hard-to-find information and links to a knowledge base for added guidance. A single, consistent, unified experience layer can directly impact employee satisfaction. The aforementioned CHRO makes a point specifically related to onboarding an employee returning from a leave, suggesting that it's one of the most short-changed stages of the LOA process. "LOA is a process of both offboarding and onboarding. Do those correctly and you'll increase your eNPS score." With Wipro's expertise in HR processes and the ServiceNow platform you can expect to: Ready to see if your LOA experience could be improved? Take the guiz below: If you answered "no" to any of the questions, I invite you to connect with me directly at servicenow.employeeexperience@wipro.com to learn more about how Wipro and ServiceNow together can help you create a consistent and personalized employee experience using our LOA solution. Transforming your LOA process may sound like a massive undertaking, but we've helped clients design and deploy solutions in as few as 90 days. We would also love to share information about our recruiting, onboarding, performance management, HR analytics, and travel and expense management solutions. References: 1 https://www.shrm.org/resourcesandtools/hr-topics/technology/ pages/amazon-hr-tech-employee-experience.aspx By Dave Zielinski, November 8, 2021 2 https://www.servicenow.com/workflow/employeeengagement/chro-roadmap-for-digital-employee-experience/ By Peter Burrows, November 25, 2020 Dean Fairchild General Manager, Global Offerings and Enablement Lead, Wipro ServiceNow Partnership Dean Fairchild's responsibilities at Wipro include defining go-to-market strategies, expanding geographic markets, and building global partner relationships. His areas of expertise range from data management to analytics, governance, and hybrid- and multi-cloud solutions. https:// www.linkedin.com/in/deanfairchild/ @imDeanFairchild Modernization

#### Priya Rani

#### Making ML Models in Banking Resilient using Adversarial Attacks

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individual behavior of the traders. If the model makes the wrong predictions and does not correctly assess fraudulent activity, the implications can be farreaching. Consider the impact of a cyber-attack on Travelex. In January of 2008, Travelex, a global currency exchange provider, saw all systems taken offline due to a ransomware attack by REvil. As a result of the hack, manual transactions inconvenienced millions of holiday travelers, and the company's stock dropped 20%. Given the sensitive information banks deal with, leveraging the discipline of adversarial machine learning is necessary to determine the weaknesses of ML models/algorithms and develop ways to resist manipulation from outside sources. The most effective strategy deals with many possible outcomes, maintains the security implications of data access, checks the weakness of ML models/algorithms during quality checks and testing and then alerts the enterprise of a possible attack on sensitive information. How to address adversarial attacks? Using adversarial examples as inputs to the ML models is an innovative strategy to improve model performance. These intentional inputs cause the model to make a mistake. From these mistakes, the model learns again and accelerates its performance. These strategies make the model more robust on an unbounded dataset, diminish operational costs and help the staff save significant time on document search tasks and analysis. It efficiently distinguishes a fraudulent activity from a non-fraudulent one making models more resilient and secure. Benefits of using adversarial attacks in modeling Adversarial attacks boost data security by preventing hacking. Financial fraud costs customers and businesses billions every year. In 2020 alone, businesses lost a record \$56 billion. Companies must ensure they know how to prevent fraud. Automation has decreased operational costs since an adversarial attack on AI models makes them reliable and resilient at predicting unforeseen circumstances. It also creates situations that help check the model's performance and enables the client to deploy the existing model in different geographic regions with minor modifications. In banking and insurance, if models make decisions like approving loans/credits, deciding insurance premiums, etc., poor modeling can lead to a significant loss of revenue, incorrect predictions, or biases. Adversarial attack solutions can prevent these risks by helping identify the gaps in the expected outcome and performance of the AI model. Proactively fixing these issues boosts the client's trust in the model and enhances customer service. Challenges in implementing AI projects for banking are prevalent, and the advantages of opting for these solutions are much higher than the risk. Adopting the approach of the adversarial attack helps identify the model's weakness and makes it more robust and less biased. Addressing the model's performance will yield higher ROI for the AI investment as it lowers the risk. According to McKinsey, the benefits of improving model performance add up so much that the annual value of AI and analytics for global banking could reach \$1 trillion by 2030. Priya Rani Technical lead, AI Solutions, Wipro Limited Priya has 12+ years of experience in IT across AI/ML, data analytics, data science, IoT and cloud technologies. She has extensive expertise in ML algorithms, data mining, deep learning/computer vision and predictive analytics. While working with CDAC, she contributed to various AI projects in collaboration with the Ministry of IT. Priva has mentored 150+ aspiring candidates in AI-ML and data science. She has published papers in International Journal and IEEE International Conference. Avil Saunshi Lead Consultant, AI Solutions, Wipro Limited Avil has 12+ years of experience in

IT across data science, image processing, deep learning, ML and cloud technologies. He has worked as a researcher in TCS Innovation labs, filed patents and published papers in International Journal and IEEE International Conference. Avil has experience in Banking, Retail, Agriculture and Automotive. Currently, he is working with banking clients and leading the data science team. Subhankar Roy Practice Partner, AI Solutions, Wipro Limited Subhankar has 21+ years of experience in IT. His skills span analytics, big data, BI, data science, AI/ML, cloud technologies, ML algorithms, Descriptive, Predictive and Prescriptive Analytics and delivering end-to-end AI projects. Subhankar was a Senior Data Scientist in the past, contributing to the AI growth for key Wipro clients. He has mentored 50+ aspiring candidates in AI/ML and data science and was responsible for setting up the first ACE Certification Track for AI-ML in Wipro. 5G is a complex network that involves millions of interconnected devices and offers low-latency data transfer and new capabilities such as network slicing and edge computing Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. Financial Services is one of the most challenging industries from a technology standpoint. www.wipro.com/blogs/mahesh-lalwani/ ----- Contact Wipro Please fill the required details to access the content Mahesh Lalwani GM, Cloud TransformationWipro FullStride Cloud Services Mahesh is a technologist at heart who enjoys working with people to generate new ideas and devise feasible solutions to broad business problems. He has 25+ years of global enterprise and startup experience across industries Healthcare, Banking & Financial Services, social media, B2B, Manufacturing and Technology. He is responsible for building GTM channels and solutions with Wipro FullStride 

# For a successful BFSI cloud transformation, build your complex landing zone right

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banking and financial services (BFSI) sector migrations, which are characterized by added complexities that make them highly challenging to execute successfully. A key tool here is to build an optimum cloud service landing zone. This is a designated area within a public cloud set up in advance to meet your organization's specific migration requirements. Preconfigured to contain every one of the services, hierarchies, capacities, and permissions your developers need to start building their applications, landing zones speed your cloud migration and thus your organization's ability to quickly innovate and grow. Without a landing zone, your developers would first have to build the entire structure upon which their cloud applications will rest, a job for which they typically have neither the expertise nor organization-wide perspective, and one that at the very least would massively slow down the migration process. A well-designed landing zone also lets you take advantage of the new functions that Google Cloud and other major cloud providers regularly add to their cloud offerings, accessing them with a single click as soon as you are ready to use them. And it reduces the chances that your migration will be missing crucial elements, which you would then have to build, or has needlessly duplication. Overall, landing zones maximize the chance that you will take full advantage of your migration, achieve those gains as quickly as possible, and have the flexibility to evolve your cloud as needed. But building them right is a lot easier in some sectors than others. Landing zones for BFSI transformations are a good case in point. Complex landing zones for complex BFSI transformations Major BFSI institutions typically offer a broad range of services to a wide range of clients across multiple geographic markets, and their landing zones need to accommodate that complexity. Their institutional structures can span retail, commercial, and wealth management groups, for example, each of which will differ in how they approach their customers, the services they offer, the applications they run, and how they store and analyze their data. In addition, financial services providers are highly regulated, needing to comply with complex rules about data backups and who may access their customers' data. These rules vary by region and individual groups within an organization will likely work within different regulatory footprints, with some working under specific national regulatory constraints and others across national boundaries. Financial services providers must also navigate a tension between delivering the best possible user experience and carefully maintaining data privacy. They have a clear incentive to mine customer data to provide services such as timely loan offers, customized financial advice, or real-time balance-sheet tracking that will help differentiate them from their competition. But at the same time, privacy rules in many parts of the world strongly limit how they can store or sell personal financial information, constraining in turn how their customized services can be built, delivered, and maintained. All of this must be accounted for when building landing zones for BFSI migration. Using templates to accelerate adoption It's common for transformation teams to use templates when creating landing zones. There's no need to reinvent the wheel, after all. Standard approaches to key system elements like identity provisioning, resource hierarchies, network design, and security controls can meet many developers' immediate requirements and provide an adequate framework for modular extensions to be added as needed. Basic templates are easy to find. Google Cloud, for example, offers both instructions for creating them and links to pre-built, production-ready template models. Using templates further speeds cloud

migration, offering immediate value for both technical users and the business overall. They can also be reused when expanding a specific business into a new geographic region, or as the basis for new templates that underpin the migration of new service categories into the cloud. Templates make management and governance easier, too, since they help ensure that both your landing zone and resulting cloud deployment are structured in ways that have been tested and refined over time and operate in a manner that is at least somewhat familiar to their users. All of this is true for BFSI landing zones, where well-designed templates offer the same advantages in terms of faster adoption, increased efficiency, and flexibility for future growth. However, in the same way that BFSI landing zones are unusually challenging to build, their templates are equally hard to get right. When building a complex landing zone, a trusted partner is key While there are plenty of ways in which BFSI templating can go wrong - we've seen banks build applications for specific use cases into their templates, for example, which just adds time and makes them less fit-for-purpose - you can take steps to maximize your chances of success. By far the most impactful of these is to work with a trusted partner with experience in the sector. Wipro FullStride Cloud Services has built Google Cloud-based templates and landing zones for a wide variety of financial organizations offering different combinations of services, within varied geographic groupings, subject to many different kinds of regulatory requirements. We use that experience to keep improving the templates we share with new partners, which keeps improving our speed of landing zone design and instantiation. Over time we have also developed an array of bespoke tools that allow us to further accelerate template and landing zone development. In addition, we understand that migration paths depend on an organization's existing infrastructure. Some start with a legacy mainframe, others with micro services, or a hybrid cloud approach. That starting point will clearly impact landing zone design. Similarly, different groups within an organization can be at different stages of readiness for cloud migration, both technically and in terms of accepting the need to move their operations into the cloud. Existing mindsets impact forward planning, too. If your migration team is heavy on mainframe or legacy database experience, half of your organization might be happy with the template they build, but those used to dealing with microservices or virtual machines will likely struggle. Forward thinking leadership is key - beyond having the right team building your templates, they need clear goals and timelines if they are to achieve the migration on time and within budget. The impact of a well-executed BFSI migration Understanding the nuances of complex landing zone development for BFSI transformations has enabled the success of projects like our recent partnership with a major UK-based BFSI client where Wipro FullStride Cloud Services helped them establish a curated cloud-native foundation on Google Cloud working across infrastructure, applications, and data with aligned security and compliance. It was certainly complex, requiring a landing zone that accommodated over 2,000 constraints and more than 80 reusable templates. But it empowered our partner to reduce IT overhead by 30%, triple its speed of agile process improvement, and increase overall efficiency by 40%. When moving to the cloud you have plenty of tools - like landing zones and templates - that can make your journey both faster and easier. Still, there's a lot to do and a lot to get right. Wipro FullStride Cloud Services can take much of the work - and downside risk - off your

organization's shoulders, speeding your transformation and letting you focus on what makes your services unique. Click here for more information about Wipro FullStride Cloud Services. Mahesh Lalwani GM, Cloud Transformation Wipro FullStride Cloud Services Mahesh is a technologist at heart who enjoys working with people to generate new ideas and devise feasible solutions to broad business problems. He has 25+ years of global enterprise and startup experience across industries Healthcare, Banking & Financial Services, social media, B2B, Manufacturing and Technology. He is responsible for building GTM channels and solutions with Wipro FullStride Cloud Services and Google Cloud. India's payment journey has changed significantly over time. What started as a barter system has evolved into cashless payments Traditional banks are reinventing themselves to meet rapidly evolving customer expectations, Emerging technologies are transforming the landscape of today's BFSI industry at the speed of light. Applications leveraging artificial intelligence (AI), machine learning (ML), blockchain, and robotic process automation are changing the face of banking operations and customer experiences.

# Proposed Safety Qualification for Reusable Software in Automotive

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autonomous driving (AD), connectivity, electrification, and shared mobility (ACES). These ACES megatrends will completely transform vehicle electronics and software-architecture requirements over the next ten years. ECUs manage the safety-critical functionality of a car through software. With the expected explosion in growth for automotive software, focusing on safety qualification is imperative. ISO Standards Address Most Quality Standard Scenarios With the introduction of ISO26262 - Functional Safety for Road Vehicle standard in 2011 and further refinement in 2018, product development for automotive following the safety recommendations became convenient. However, there are scenarios where car manufacturers prefer to use legacy software components instead of building everything from scratch. Or it is necessary to use a commercial-off-the-shelf (COTS) solution as part of the product. But these components/solutions are not functional safety certified. Safety qualification is needed to address these scenarios. New Challenges for Vehicle Software Standards ISO 26262 specifies several approaches to qualify the legacy or COTS software components not developed following IS026262 standards. However, these approaches require documentation or field data which are not available in most cases. For these scenarios, there are a few specific challenges to address: The challenges above are faced by different automotive organizations while qualifying reusable software components. Some organizations have found a route to address the challenges, but each has taken a different approach. For example, Red Hat's Linux-based in-vehicle OS attempts to qualify each software package. In case of any gap, they opt for a complete redevelopment following the safety standard. On the other hand, Altia is making its existing HMI technology ASIL compliant by introducing a safety monitor, as is the QT Company. Similarly, SafeTTy Systems has developed ASIL B Linux by defining a run-time monitoring technique. Solution Recommendation to Address Quality While some market players have identified different routes to make their reusable software components safety compliant, the solution developed using the ASIL decomposition techniques (specified by ISO 26262:2018-9) seems to hold the most promise. Adding a 'Wrapper' or 'Supervisor' component, responsible for detecting irregular behavior and taking recovery steps, would provide a more comprehensive solution. The suggested architectural changes are below: Note: X represents the different ASIL levels (i.e., A, B, C, or D) This architecture can be explained through the ISO 26262: 2018-9-5.4.7 clause -ASIL decomposition between an intended functionality and its safety mechanism. In this improved architecture, all communication between the system software and the reusable software component would go through the Supervisor module to ensure any failures in the reusable software component do not cascade to other parts of the software. Revised Strategy Provides Additional Business Benefits The solution described above gives the system integrator the flexibility to use any legacy software component or COTS solution without the time-consuming task of looking into the development history, i.e., configuration management record, change management record, field data, test log, etc. But this architecture provides other valuable benefits: A New Standard for the Software-Driven Architecture All car manufacturers invest heavily in new features and technologies in modern vehicles but ensuring driving safety is a central focus. With the introduction of software-driven vehicle architecture, many COTS or legacy software components from the IT world (e.g., container

ecosystem, middleware protocol such as data distribution service, service discovery protocol, etc.) will be in modern cars. To safety-certify those components, the revised ASIL strategy with the 'Supervisor,' having runtime monitoring capability, will be the most effective technique for the automotive software developer to achieve the overall safety requirements of the products when utilizing reusable components. Industry: Arnik Sarkar Senior Architect - Automotive Functional Safety Arnik has been with Wipro for 15+ years, with work experience spanning across different domains of Automotive. He has contributed to several in-house competency building initiatives, the creation of intellectual property and more over Functional Safety Certification for Wipro. Currently Arnik is leading the Automotive Functional safety COE of Wipro. Sayanshree Ghosh Architect - Automotive Functional Safety Sayanshree has more than 11 years of experience in software development. While working on different Automotive domains according to ISO26262 - she has acquired considerable experience in Safety Architecture and Safety compliance. She is an active member of Automotive Functional safety COE of Wipro. To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. CSPs are looking to the enterprise (business-to-business) segment to help monetize their investments in 5G. As management guru Peter Drucker once said, "What gets measured, gets managed." www.wipro.com/blogs/chandra-surbhat/ ---- Related Articles Contact Wipro Please fill the required details to access the content

#### Metaverse: Business Implications, Monetization Models and Adoption Challenges

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enables experience-driven use cases that cut across many business areas. Companies can reimagine engagement in many business functions to provide more meaningful experiences. Where can the Metaverse improve business? How about everything from event hosting, immersive learning and development, e-sporting, gamification, meta mall, remote field service, marketing, recruitment, onboarding, fashion, and home improvement solutions, to digital arts, museums and metaverse real estate. The multidimensional aspect of the Metaverse will create new-age algorithm-driven personalization platforms built on user interests and social graphs. This hyper-personalization for users will trigger new subscription-based models and digital marketplaces yet to be imagined. Social media will transform to open collaboration platforms. Harvesting more collaboration data will allow brands to use finely tuned and pertinent information for improved customer targeting and personalization. And data from this new immersive environment can feed seamlessly into product and service development and brand positioning. Dynamic customer service channels will help identify developing revenue streams and markets. Evolving trends include digital identities and innovative commerce models like cryptocurrencies and tokenization. These new models will increase brand adoption, create more opportunities and become mainstream in the new creator economy. The Emergence of New Monetization Models Perhaps one of the most significant developments from the Metaverse will be emerging monetization opportunities. Companies that are involved with the Metaverse from the start will be able to leverage these new models early and establish market share. One new area for metaverse monetization is through platform-based services. Enterprises that bundle core platform capability with new services that span cognitive content moderation, connectivity services, AI, and edge computing, can create a One Stop Metaverse Shop. The Metaverse, coupled with Web3.0, will lead to a boundaryless creator economy. Just like the Internet drove new business models, metaverse users will see and capitalize on opportunities to create content. But this time, user communities will have control over and flexibility to manage their content and pricing, promoting a more equitable society. Content creators will have different channels for customer acquisition, and entrepreneurial opportunities and direct relationships between creators and followers will drive growth. Business models will proliferate across creators, developers, players, marketers and metaverse education to provide new revenue models. Budding examples of new revenue models include non-fungible token (NFT) minting, selling (examples include collectible digital art, tickets to shows, custom 3D models, etc.), and commissions from the resell of NFTs - direct to the developer and direct to creator monetization. Metaverse Adoption Challenges The Metaverse will enable appreciable business outcomes. But doing business in the Metaverse is not without its challenges. Enterprises should have a welldefined strategy to address issues that impact data privacy and consent, culture, technology and organizational readiness. Defining Cyber Trust Establishing trust as the foundation of the Metaverse is critical. There are multiple dimensions of cyber-trust - setting user expectations, safety, user experience, controlling participation and ability to manage existence. The essential attributes of identity include verified versus unverified and known versus unknown. Creating people and brand identity with the role of future identity providers in the Metaverse will profoundly impact identity-related concerns. Regulation Foundation While there may not be any current laws

or regulations that apply to the Metaverse, existing internet and copyright laws will apply. Policing the Metaverse will be another dimension to ensure that platforms comply with user-defined access needs. Enterprises should have a defined cyber security strategy that encompasses the following: The Metaverse will Transform Experiences, Business Models and Channels The Metaverse will open new channels from brand marketing and positioning to product development and new ways to host sales events. There will be new business models for creators, developers, and players that will enable the monetization of digital collectibles and content. Enabling 3D worlds, location and context-aware interactions and transactions at a global scale will require computing, storage and network capabilities that are an order of magnitude greater than what is in use today. Businesses should adopt an interdisciplinary approach to maximize and scale up for metaverse opportunities. Start by developing a strategy to assess the platform for viability, desirability, and feasibility of all addressable possibilities. To fully capitalize on this platform, companies should apply design thinking that can capture people's imaginations in unique and compelling ways to deliver meaningful and distinctive experiences. Industry: It's every company's worst nightmare. In 2019, a global metals manufacturer experienced a ransom-ware attack in which hackers seized and encrypted its computer files, then demanded payment to unlock them. Agility as a concept has been discussed for years, though the competitive advantage of being more agile came into sharp focus in 2020. The increased pace of change, rapidly evolving customer needs, compressed timeframes for responding — all of these and more drove the topic back onto every Board agenda. Over the past few months, organizations have dealt with the impact of COVID-19 - from the plummeting economy to other severe business disruptions. Traditional work strategies were challenged, working from home has become the norm, and digital infrastructures were revamped to adjust to remote working https://www.wipro.com/blogs/joseph-shaw/ ---- Related Articles Contact Wipro Please fill the required details to access the content ===============

#### Get The Borrower to Hit "Submit"

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Rates Consumer lending has evolved dramatically since the days of handscribbling paper applications at the local bank or credit union. The rapid
growth of fintech has caused a disruption that can no longer be ignored.
Financial institutions that offer lending services must adapt to new ways of
doing business or risk getting pushed out of the market. A lender's ability to
eliminate friction in the digital application process has become essential to

give borrowers the efficient approval and funding process that they expect. Four strategies, in particular, can convince potential borrowers to hit the "submit" button and increase a lender's application pull-through rates. Offer Rapid, Seamless Comparison Tools Customers expect choice and simplicity in everything, including the consumer lending experience. Today's borrowers shop around for the best product, comparing variables like rate, term and penalties. They want to be able to make these comparisons without filling out a full application. Consumers expect the origination system to have an embedded pricing engine that can sort through all available options based on minimal data entry. To boost close rates, manual data entry that is not absolutely essential should be eliminated from the pricing engine. In many cases, visually-driven click-through options can speed potential customers through the pricing process while providing a more appealing consumer experience. 2. Accelerate Application Intake with Data Feeds Lenders should also avoid asking questions that can be answered through information feeds from data providers. Information fetch comes at a cost, but the revenue upside of higher application volumes should offset the cost of the feeds. As with pricing engines, the manual entry fields required to approve a consumer loan should be reduced to the lowest possible number. In many cases, only three instances of manual entry are needed to start an auto loan application pre-approval process: first name, last name and social security number. If the solution is configured correctly, it will automatically pull all of the other information needed to make a pre-approval decision, from credit reports to assets, income and bank information. 3. Adopt Automated Pre-qualification Automated pre-qualification involves setting pre-determined business rules - like credit score and income requirements to automatically approve or deny an applicant. When pre-qualification business rules are in place, it frees critical bandwidth from existing manual processes. While many institutions currently execute consumer loan applications in a straight-through process, providing full approval digitally in real time can unlock significant advantages for lenders. 4. Leverage AI to Enable Smart Automation In addition to automated pre-qualification, machine learning and AI-enabled automation can further improve the application experience for customers. With AI/ML, decisions traditionally made by a human underwriter are instead made in real time by a datadriven program that follows business rules that are set in place by the institution, while also constantly learning and evolving under supervision from the underwriting team. AI/ML can dramatically speed up the approval process for potential borrowers who do not automatically pre-qualify. AI can also be used in providing counteroffers, orchestrating the loan application workflow and automating income calculation. Bring it All Together with Seamless Communication Investing in embedded and integrated systems unlocks tremendous potential in the form of time, cost savings and a better consumer lending experience. All events in a loan origination system should be conducted in real time, with alerts sent automatically to the right stakeholders. With seamless communication, these automated workflows and real time responses reduce friction within an institution's consumer loan application process, leading to lower applicant attrition, a higher number of pre-approved applicants and increased funding rates. Joseph Shaw Head of Sales, Wipro Gallagher Solutions Joseph is responsible for the overall execution, strategy and priorities of the Wipro Gallagher Solutions sales team. With 20 years of industry experience and deep expertise in mortgage

banking and technology innovation, Joe is committed to helping financial institutions and lenders use technology to transform how they operate and grow. Before joining Wipro, he spent the last decade in fintech working for Accenture, Q2 and Tavant. India's payment journey has changed significantly over time. What started as a barter system has evolved into cashless payments Traditional banks are reinventing themselves to meet rapidly evolving customer expectations, Emerging technologies are transforming the landscape of today's BFSI industry at the speed of light. Applications leveraging artificial intelligence (AI), machine learning (ML), blockchain, and robotic process automation are changing the face of banking operations and customer experiences.

## Optimizing Field Services Through AR

----- Arcticle source ----- https://www.wipro.com/blogs/sidharth-mukherjee/ optimizing-field-services-through-ar/ ---- About the Author Contact Wipro Related Blogs Transforming the leave-of-absence experience into an employee-retention tool A Smarter Way to Collaborate and Build Applications with Azure DevOps Is your Mobility Landscape Harnessing the Full Potential of Mobility Managed Services & Security? Please fill the required details to access the content Optimizing Field services Through AR November | 2022 In the evolving landscape of digital workplaces, efficient field service operations are critical to ensuring reduced downtime and high productivity with faster resolutions. Now more than ever, organizations are looking for effective ways to enhance field services. One such way is the shift-left approach using augmented reality (AR). Evolving expectations in field service management The field service management industry is growing. Its estimated market size of \$3.24 billion (USD) in 2021 is expected to reach \$8.06 billion in 2028, at a CAGR of 13.9%. At the same time, the industry has undergone massive changes over the last few years as the pandemic restricted in-person field service visits. To adapt to these changes, organizations have invested in emerging technologies such as artificial intelligence (AI), machine learning (ML), and augmented reality (AR) for remote service and predictive maintenance. The adoption of advanced technologies is expected to drive industry growth, yet many organizations still follow a traditional approach to field services which is riddled with challenges that create problems for customers, the organization, and the field agents. Learning gaps between technicians, the dispatch of wrong equipment, and a shortage of experienced staff can increase the mean time

to repair (MTTR), adding to customer frustration. In 2021, the cost of an hour of unplanned server downtime exceeded \$300,000 for 91% of enterprises, and 44% of large enterprises claimed that one hour of unexpected downtime could cost their organization more than \$1 million. To remediate the problems associated with a traditional field services approach, organizations can adopt capabilities to enable lower-level employees (L1) to do the work typically done by higher-level employees (L2, L3). This is called a shift-left approach. Why shift left? A shift-left approach essentially brings processes, technologies, and experts closer to the customer, supporting self-service, optimizing processes, and increasing efficiency. The pandemic has accelerated digitalization across all industries, and customers have started expecting more personalized, faster digital service solutions. The shift-left approach can benefit field service companies and their customers, but how do organizations implement the approach? The answer lies in the adoption of modern technologies such as AR. Transforming field service by shifting left using AR AR applications on mobile devices, tablets, wearables can enable customers to solve issues independently or collaborate remotely with technicians who can help them navigate the issue. Customers can say goodbye to bulky manuals and lengthy instructions, which can be replaced by immersive information provided with the help of AR. AR-enabled devices powered by AI can further enhance capabilities, offering field service agents and customers elevated support. The diagram below illustrates how AR-based solutions can support key aspects of field services. AR-based solutions can be applied throughout industries, to both IT and non-IT devices, delivering significant value to field service organizations and the operations they support. Using live visual interactions, easy integrations, self-guided instructions, and contextual insights, AR solutions can empower field agents to detect and resolve problems efficiently and boost remote solve rates, leading to reduced MTTR, higher FTRs, and lower skill gaps. Optimized field scheduling from L3/2 to L1 and enhanced onboarding through AR solutions can also lead to reduced operational expenses. AR solutions enable field agents to streamline their workflows and work more effectively, resulting in improved efficiency and higher customer satisfaction. Wipro is embracing this innovation by teaming up with pioneering tech partners such as CareAR. You can learn more about our AI and AR solutions at Wipro Holmes. Industry: Sidharth Mukherjee GM and Practice Head, Digital Workplace Services Sidharth Mukherjee (Sid) is a dynamic leader and a true technology enthusiast at heart. He has more than 18 years of experience driving cutting-edge cloud and infrastructure services transformations for Fortune 500 organizations. Sid has a passion for delivering "what's next" and improving "what's now" for enterprise technology, while keeping a keen focus on employee experience and innovation. He has an academic background specializing in IT and management, and is currently focused on harnessing the power of AI, cognition, blockchain, and analytics to create an intricate workspace metaverse aligned with the future of work. He is an alum of IIM Ahmedabad and specializes in business strategy, IT, and management. Ravi Advani VP of Industry Solutions at CareAR Ravi is VP of Industry Solutions at CareAR, A Xerox Company, and is responsible for GTM through global channel partner ecosystem, delivering consistent growth, value, and innovation to customers for successful transformation of their businesses. With over two decades of experience in managed services, leadership roles in digital workplace

services and solutions management and digital transformation, Ravi is passionate about the future of work, and about applying technology and services solutions to deliver superior user experience and drive business outcomes, appy employees usually stay at their jobs, frustrated workers often don't. Chief human resource officers (CHROs) tell us that the corporate leave of absence (LOA) process is one of the most common sources of employee frustration. Employees often rank their LOA experiences low on the satisfaction scale, using descriptors such as complicated, confusing, inconsistent, time consuming, and unresolved. In a world where business is evolving at the speed of thought, rapidly changing market conditions pose several challenges for enterprises across industries. Enterprise Mobility Management (EMM) involves the process management and IT services needed by any organization to acquire, provision, and support the mobile devices (tablets, smartphones etc.) and other devices used by the organization's work force. ====================== ----- Arcticle source ----- https://www.wipro.com/blogs/anil-kumar-mallanna/ ---- Related Articles Contact Wipro Please fill the required details to access the content Anil Kumar Mallanna ===============

### The Day After: De-risking Legacy Modernization

----- Arcticle source ----- https://www.wipro.com/blogs/anil-kumar-mallanna/ the-day-after-de-risking-legacy-modernization/ ---- About the Authors Contact Wipro Please fill the required details to access the content The Day After: De-risking Legacy Modernization February | 2023 A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it definitely isn't wise today with ever-evolving technological advancements and the business benefits that come with them. If business and IT leaders consider modernizing legacy systems to be a big risk, they should be aware of the even bigger risks of not modernizing them that will have an inevitable impact on their business. Mainframes remain an important asset A significant number of Fortune 100 companies have mainframes, yet a strong ambition is growing among IT and business decision-makers to harness the value of cloud. According to a recent study, 67 of the Fortune 100, 45 of the top 50 banks, 8 of the top 10 insurers, 8 of the top 10 telcos, 7 of the top 10 retailers, and 4 of the top 5 airlines use mainframes to run business-critical applications and operations. Despite their widespread use, these businesscritical, mainframe-based applications and platforms lead to several challenges, such as a high total cost of operations (TCO) and a lack of agility. These pose clear impediments to rapid business growth, especially when compared to what a typical cloud-native application offers, allowing enterprises to achieve their digital transformation objectives of innovation and agility while ensuring existing business process and practices aren't lost or disrupted. With an awareness of cloud-driven benefits, most business and IT leaders can develop clear strategies for modernizing their legacy

mainframes to become cloud-native applications and unlock the value of cloud to deliver transformative outcomes. Planning for the "day after" Modernization projects often fail to live up to the hype due to a lack of strategic planning. According to the 2021 Mainframe Modernization Business Barometer Report, 77% of respondents to the survey said they started but failed to complete at least one modernization program, and a lack of adequate planning was cited as the primary reason for those failures. Thus, modernization programs have a high probability of failing to deliver the outcome within schedule, without effort overruns, and with a positive return on investment (ROI). One of the main reasons for such a high degree of failure is not planning for the "day after." In most cases, modernization solution owners only think about application code, databases, and data, but they don't plan for the entire platform ecosystem, including the interfaces, target operations, nonfunctional requirements (NFRs), architecture and, most importantly, the loss of knowledge. These oversights are a major risk to modernization initiatives, irrespective of which solution customers are trying to implement. Even simple lift-and-shift or rehosting projects are not trivial. These overseen areas often are encountered in testing or worst-case analysis during production parallel, resulting in delayed go-lives and in some cases "no-go" situations, impacting brand value, causing revenue loss or major rework and, in most cases, forcing the enterprise back to the drawing board. First step: De-risking a holistic strategy The key to a successful modernization is to plan for the day after scenario right from the inception of the program itself. This planning should entail a series of vital steps: Such planning should not only cover the code, data, and infrastructure, but should also include intangible assets, such as tech knowledge or standard operating procedures (SOPs) to effectively manage and maintain the modernized application/system. Doing so will uncover all the risks that can derail a modernization program. Let us look at the insurance sector as an example. An insurance provider can assess its existing systems, developed through years of investments to get its rating and regulatory compliance correct. The enterprise's modernization will then focus on three essential steps: 1. Migrating their systems to a new cloud platform 2. Refactoring the monolith system by rearchitecting it into a macro/micro services-based architecture focused on specific components (for example, modularizing the following individual components as "engines" or services): a. Rating b. Regulatory compliance c. Policy issuance 3. Leveraging these components/engines to bring new insurance products and distribution options to market more quickly and efficiently, based on greater levels of agility, while delivering better customer experiences At Wipro, we focus on a holistic risk management approach that covers the full range of business, IT, process, employee, operational, and financial risks, as shown below. Our de-risking strategy encourages customers to consider several "what if" scenarios and ask a number of guestions: As an example, in an automated migration scenario, the generated target code was causing readability and maintainability issues for the developers, who were having to compare it to handwritten code. The risks that can go unnoticed in such a scenario are the carryover of technical debt and the loss of knowledge through the process, which should be addressed upfront in the planning stage. As a mitigation, we recommend refactoring the code as well as focusing on knowledge management throughout the modernization journey. To prevent a loss of knowledge, teams should document the current and target capabilities,

business rules/logic, code walkthroughs, and upskilling and cross-skilling initiatives while maintaining clarity on the target system's known error database/IT service management (KEDB/ITSM) process. Similarly, this approach can be extended to scenarios of testing, governance, and so on. Wipro, having delivered successful large modernization programs, has consistently demonstrated the de-risk approach throughout our end-to-end modernization projects, eliminating an enterprise's unanticipated risks. Our approach focuses on collaboration with business and IT leadership teams, proactively identifying and addressing the inherent fears or risks to ensure a successful modernization journey. As a case in point, one of our large financial services customers wanted to start on a large custody platform modernization, and its initial fear was a loss of knowledge due to the replacement of its legacy mainframe system, which manages over US\$2 trillion worth of assets. The leadership team's fundamental ask was to derisk the initiative and help their business build confidence even before starting on the modernization journey. The Wipro team responded by quickly identifying, understanding, and delivering comprehensive documentation on an application's technical capabilities and how it would align with the custody platform's business capabilities and processes, hence eliminating any of the business team's doubts about how to move forward. Another case in point is a large student aid organization, whose objective was to modernize its mainframe system, while their long-term goal was to be the platform of choice for student loan servicing. The company had previously embarked on a modernization project that, despite reducing TCO, was not delivering the expected results or addressing its future vision. Through a strategic consulting engagement built around our de-risked modernization approach, Wipro understood the enterprise's business objectives, analyzed its legacy applications, and determined the right modernization strategy for harnessing cloud-native platform capabilities and helping them become a more competitive brand, thus ensuring relevance as well as future-ready resiliency. As writer Frank Peretti said, "Don't worry about getting perfect; just keep getting better." Interestingly, this advice applies to legacy modernization. Enterprises have a plethora of options for modernizing their business-critical mainframe applications, with hyperscalers offering kickstart assessments and proof of concepts/pilots. However, it is extremely important to look at strategies that clearly offer an end-to-end, accelerated. and de-risked modernization process. Wipro's holistic approach meets all of these modernization journey criteria, and our expertise enables us to partner with businesses across the industry spectrum, including large financial services (such as banking, capital markets, and insurance) and healthcare organizations that are risk averse but are aspiring to modernize. We can ensure that an enterprise's "day after" following a modernization will enable it to adopt new innovations and discover the art of possible in partnership with the Wipro Legacy Modernization team. Anil Kumar Mallanna Senior Consultant - Legacy Modernization, Wipro Anil brings in 25+ years of IT experience with extensive business knowledge of enterprisewide applications and experience in designing & implementing mission critical applications. He leads our Americas Legacy Modernization charter and has led successful Sales, Presales, Consulting and IT Delivery organizations serving global leaders in large Financial Services Industries. John Hollinger General Manager - Insurance, Wipro John joined Wipro in January of 2022 and has brought over 30 years of Consulting, Technology,

and Sales Experience to his role at Wipro. He has overall responsibility for our Insurance Sector for the U.S. During his career John has held senior leadership positions at AIG (NYSE:AIG) where he was responsible for LOB system development and support services to AIG's operations in 40 countries, he led EMC's (NYSE:EMC) Microsoft Services division during which time he led business development and delivery activities to consistent growth in excess of 20% year over year, and most recently he had responsibility for business growth in Accenture/Avanade's Northeast region. He has also started several companies including New Technology Partners and Technology Training Group, which were later acquired. John has extensive expertise in Program/Project Management, Enterprise Architecture, and Optimization of IT Operations and Infrastructure. He has applied these skills with many different clients in the Insurance Sector.

#### De-Risking Mainframe Modernization for the Banking Industry

----- Arcticle source ----- https://www.wipro.com/blogs/anil-kumar-mallanna/ de-risking-mainframe-modernization-for-the-banking-industry/ ----- About the Authors Contact Wipro Please fill the required details to access the content De-Risking Mainframe Modernization for the Banking Industry June | 2023 A common approach to maintaining mainframe or legacy systems has been, "If something isn't broken, don't fix it." Although this may have been an acceptable approach in the past, enabling enterprises to avoid the challenges and risks of modernizing their systems, it isn't wise today with ever-evolving technological advancements and the business benefits that come with them. If business and IT leaders in the banking industry consider modernizing mainframe systems to be a big risk, they should be aware of the even bigger risks of not modernizing them, that will have an inevitable impact on the business. Legacy Mainframe Applications Pose Challenges Mainframe-based applications and platforms lead to several challenges, such as a high total cost of operations (TCO), technical debt and complexity, skills shortages, data silos, regulatory and risk compliance, lack of agility and slower time to market. These pose clear impediments to business growth, especially when compared to a typical cloud-native application, which can promote innovation and agility while ensuring existing business process and practices aren't lost or disrupted. Despite all this, 44 of 50 of the world's top banks run on mainframes. It is a well-known fact that most of the top banks' core banking business runs on mainframes, offering security and control benefits while posing challenges to business agility and innovation. With so much for banks to gain in the cloud, the best approach is not to avoid modernization but to approach it more strategically. By developing clear strategies for modernizing legacy mainframes into cloudnative applications, business and IT leaders can effectively "de-risk" the mainframe modernization, accessing the full benefits of the cloud with

minimal disruptions to their banking business. Modernization projects often fail to live up to the hype due to a lack of strategic planning. According to the 2021 Mainframe Modernization Business Barometer Report, 77% of respondents said they started but failed to complete at least one modernization program, and a lack of adequate planning was cited as the primary reason for those failures. Modernization solution owners often think about application code, databases, and data, but they seldom consider the entire platform ecosystem - the interfaces, target operations, nonfunctional requirements (NFRs), architecture and the loss of knowledge. These oversights pose major risks to modernization initiatives, irrespective of which solution customers are trying to implement. Even seemingly simple lift-and-shift or rehosting projects require planning to prepare for potential effects across the entire ecosystem. While overlooked areas are often encountered in testing or worst-case analysis during production parallel, they can delay go-lives or halt them entirely, negatively impacting the brand, revenues, and timelines. A Holistic De-Risking Strategy The key to a successful modernization is detailed planning, which can identify potential risks and propose appropriate mitigation strategies. This kind of holistic derisking strategy also accounts for various critical points such as: For example, a bank or financial services provider might spend millions of dollars on legacy platforms with middleware in between to build customer and staff experience features and compliance checks. When the firm decides to modernize its mainframe systems, there are several major operations its IT teams will need to consider and develop strategies for: Wipro uses a holistic risk-management approach that covers the full range of business, IT, process, employee, operational, and financial risks, as shown below. The derisking strategy encourages clients to consider several "what if" scenarios and ask strategic questions such as Is there a comprehensive functional knowledge of the current application? Does the data modernization strategy align with the enterprise strategy? Are we prepared for test automation and parallel runs? Do we have a fallback plan automated to react instantaneously? Is there business clarity on deployment approach (e.g., incremental vs. big bang)? Wipro has successfully delivered many large modernization programs, consistently demonstrating the de-risk approach by eliminating unanticipated risks. Wipro's approach focuses on collaboration with business and IT leadership teams, proactively identifying and addressing the inherent fears or risks ensuring a successful modernization journey. As an example, one of Wipro's large financial services clients wanted to start on a large custody platform modernization but feared knowledge loss due to the replacement of its legacy mainframe system, which manages over \$2 trillion (USD) worth of assets. The leadership team's fundamental ask was to de-risk the initiative and help their business build confidence even before starting on the modernization journey. Wipro responded by guickly identifying, understanding, and delivering comprehensive documentation on an application's technical capabilities and how it would align with the custody platform's business capabilities and processes, eliminating any of the business team's doubts about how to move forward. Wipro also worked with a large student aid organization which sought to modernize its mainframe system and become the platform of choice for student loan servicing. The organization had previously embarked on a modernization project that, despite reducing TCO, was not delivering the expected results. Through a strategic consulting

engagement built around the de-risked modernization approach, Wipro understood the enterprise's business objectives, analyzed its legacy applications, and determined the right modernization strategy for harnessing cloud-native platform capabilities, helping them become a more competitive brand, ensuring relevance and resiliency. With so many options for how to modernize business-critical mainframe applications, enterprises can narrow the field by filtering for strategies that clearly offer an end-toend, accelerated, and de-risked modernization process. Wipro's holistic approach to legacy modernization meets all these criteria, while its expertise enables Wipro to partner with businesses across the industry spectrum, including large financial services (banking, capital markets, insurance) and healthcare organizations that are risk averse but are aspiring to modernize. Such strategic approaches can help banking and financial services organizations confidently pursue new opportunities without the fear of exposing themselves to new risks. Anil Kumar Mallanna Senior Consultant - Legacy Modernization, Wipro FullStride Cloud Anil has over 25 years of IT experience with extensive business knowledge of enterprise-wide applications and designing and implementing mission-critical applications. He leads Wipro FullStride Cloud's Americas Legacy Modernization Charter and has led successful sales, presales, consulting, and IT delivery organizations, serving global leaders in large financial services industries. Ashish Shreni Practice Head - Consumer Lending, Wipro Limited Ashish leads the banking domain and consulting practice for the US at Wipro. He is responsible for CXO advisory, CXO relationships, data and analytics, digital strategy, process and technology transformation, risk management, and partnership and alliance strategies, as well as industry representation and Arcticle source ---- https://www.wipro.com/blogs/raj-br/ ---- Related Articles Contact Wipro Please fill the required details to access the content Raj B.R. Raj B.R Practice Director - 5G IoT & Smart City Raj heads the New-Age Solutions team with the charter to develop IoT solutions for the 5G era. He is the Practice Director of Wipro's global Smart City team and plays a key role in consulting and business initiations with global clients. He has 28 years of experience in multiple domains with proven track record for innovative technologies, customer centricity and passion for excellence. \_\_\_\_\_

#### Connectivity and Interoperability: Realizing the Full Potential of Comprehensive IoT Solutions

---- Arcticle source ---- https://www.wipro.com/blogs/raj-br/connectivity-and-interoperability/ ---- About the Authors Contact Wipro Please fill the required details to access the content Connectivity and Interoperability: Realizing the Full Potential of Comprehensive IoT Solutions February | 2023 To harness the full potential of connected devices, enterprises need comprehensive IoT solutions that empower the business. The Internet of

Things (IoT) has become increasingly important in recent years because of its ability to connect various devices and gather tremendous amounts of data, leading to more efficient and intelligent outcomes. Connected devices are offering organizations greater insight into asset performance and various aspects of operations, allowing them to optimize processes faster and more often. Across industries, IoT is helping organizations reduce costs through predictive maintenance, improve safety and security through more comprehensive monitoring and improve sustainability by optimizing performance. The Internet of Things also allows for the automation of various processes and systems not covered under standard automation systems, leading to increased efficiency and productivity. It's clear that IoT has the potential to revolutionize the way people work and live. But to harness the full potential of connected devices, organizations must invest in comprehensive solutions that address the unique challenges to IoT while providing the capabilities necessary to grow. Challenges to IoT As organizations add more connected devices, managing and integrating those devices can become increasingly difficult, posing unique challenges to the organization. Connectivity The value of IoT depends on how well data is transferred between devices, so a strong, reliable network with low latency and high bandwidth is key, especially as systems grow and process more data. Interoperability IoT devices and systems can come from different vendors but need to be integrated seamlessly to ensure they work well together. Scalability IoT management solutions must be scalable to accommodate the addition of new devices while maintaining performance and security. Solutions must also be cost-effective in terms of development and deployment, maintenance, and support. Security IoT devices often collect and transmit sensitive data, making them a target for cyberattacks. Comprehensive IoT solutions must include robust security features to protect sensitive data and prevent unauthorized access. Conventional IoT solution designs require fixed wired architectures that can limit availability, speed, and service regions. Older designs may also lack the security and interoperability necessary to deliver real value over the long term. Advanced IoT capabilities, on the other hand, can minimize or even eliminate those challenges. As a global system integrator focused on equipping enterprises with leading-edge technologies and applications platform management, Wipro leverages a mix of advanced networking technologies and partnerships with leading telecom providers to offer clients both fixed and wireless connectivity solutions for almost any company asset, enabling them to build IoT infrastructure almost anywhere they need to operate. Comprehensive IoT solutions from Wipro and AT&T Wipro and AT&T have partnered to support hundreds of customers across retail, manufacturing, financial, and utilities industries. Combining Wipro's platform management and support services with AT&T networking and IoT management capabilities, the partnership has helped organizations build the platforms required to support advanced IoT programs and grow their businesses. The Wipro Smart i-Connect<sup>™</sup> (WSiC), for example, is a low-code IoT solution that enables essential IoT functions such as data collection, storage, processing, advanced analytics, and application integration. Its open standard architecture supports multiple protocols and is easily integrated with other systems using open source APIs. Wipro combines WSiC with the AT&T Control Center, a leading IoT connectivity management platform, to offer clients greater connectivity and control over their assets. The powerful

partner solution also enables Industry 4.0 capabilities such as predictive maintenance, autonomous robotics, connected supplier ecosystems, digital twins, and enhanced supply chain management, allowing organizations to unlock significant business value. "AT&T is a vital partner for Wipro in our mission to deliver advanced IoT capabilities to our customers without limitations. Our joint expertise in systems orchestration and networking helps organizations build necessary platforms for IoT programs and drive business growth. Our innovative, secure, and scalable IoT solution is built on a shared commitment to help customers optimize their processes." - Ashish Khare General Manager and Global Head - IoT, 5G, Edge and Smart Cities Wipro Limited The Wipro Smart i-Connect and AT&T Control Center can be used to power everything from smart manufacturing (connected plants, shop floors, assets) and smart logistics (real-time fleet management, asset tracking and supply chain), to smart buildings (sustainability and energy monitoring, vision analytics) and smart cities (traffic management, emergency response). Connected devices are also instrumental to other advanced technologies such as augmented reality and the metaverse, which promise to further enhance tasks like employee training, quality assurance, and logistics. WSiC and AT&T Control Center can help businesses manage their connected assets and ensure they stay connected through a reliably strong network. Organizations can leverage WSiC as a solution for almost any IoT use case around the world. Wipro and AT&T bring a powerful joint IoT solution, offering a secure global connection to remotely access assets to monitor and control as needed. To learn more about Wipro's IoT solutions and partnership ecosystem, contact us at info@wipro.com or visit wipro.com/contact-wipro. Raj B.R Practice Director - 5G IoT & Smart City Raj heads the New-Age Solutions team with the charter to develop IoT solutions for the 5G era. He is the Practice Director of Wipro's global Smart City team and plays a key role in consulting and business initiations with global clients. He has 28 years of experience in multiple domains with proven track record for innovative technologies, customer centricity and passion for excellence. Ashish Khare General Manager & Practice Head -IOT, 5G & Smart City Ashish has over 30 years of experience in consulting, system integration and managed services in IT and OT. He heads the 5G, IoT and Smart City in CIS group. Ashish is currently working on IT-OT convergence and a service management framework for IoT and OT. He owns multiple IPs including Wipro Smart i-connect™, an IoT platform with ----- Arcticle source ----- https://www.wipro.com/blogs/arun-kurup/ -----Contact Wipro Please fill the required details to access the content Arun Kurup Arun Kurup General Manager, Enterprise Futuring, Wipro Arun is a seasoned shared service expert with overs 20 year of experience in planning, implementing, and transforming global operations for Fortune 500 customers. He helps organizations drive performance through the transformation of operations. In his current role, he leads the strategic customer relationships in Europe and is responsible for driving profitable 

# The Digital Force: Reimagining Global Organizations in the Wake of Disruption

----- Arcticle source ----- https://www.wipro.com/blogs/arun-kurup/the-digitalforce-reimagining-global-organizations-in-the-wake-of-disruption/ ----- About the Author Contact Wipro Please fill the required details to access the content The Digital Force: Reimagining Global Organizations in the Wake of Disruption If the largest challenge facing global companies was digitalization, they would have their work cut out for them. Instead, their task is even harder: They need to design comprehensive digital operations amid a revolution in ways of working as well as significant economic and geopolitical disruptions. These external shocks have affected everything from order-to-fulfillment channels to talent acquisition strategies. Enterprises find themselves transforming operating environments, reshaping supply chains, and challenging traditional business models in a business climate that resembles nothing that has come before. Juggling new digitalization projects in such a fraught climate isn't easy. Even so, aggressive digitalization remains the only path forward for organizations that want to seize new opportunities as they emerge from these macroshocks. Customizing Transformation Journeys According to a recent McKinsey survey, digitally adept organizations are aggressively adopting automated processes, advanced DevOps practices, and public cloud usage to enable rapid innovation and cost optimization. However, not all organizations are at this stage; many are grappling to catch up. These companies need to critically assess their readiness for change and build customized transformation journeys if they want to remain competitive. The greater their digital deficit, the more they will need to rely on collaborations with digital partners who can help define the scope of those transformation journeys and scale successful programs across all organizational touchpoints. Navigating Global Digital Landscapes Global organizations might face a more seamless digitalization path if national regulatory norms were converging toward something resembling international standards and best practices. Instead, the opposite is happening. Regulatory regimes vary greatly, and technology has become a new battleground as global powers vie to hold and grow their spheres of influence. In this environment, global business expansion requires a deep understanding of in-country compliance related to privacy, climate impacts, supply chains, and other factors. Compliance with data protection regulations like the EU's GDPR, for example, is now paramount, as non-compliance could result in severe penalties. Increasingly, regulations will also have more teeth when it comes to controlling the climate impacts of technology. In this context, organizations need a partner that comprehends the regulatory landscape in a global context and can reveal digitalization pathways that will function seamlessly across a truly global business. Aligning with Sector-specific Changes Keeping pace with emerging industry-specific changes and risks is

crucial, and companies will need to adapt to changes in their industries at an ever-faster pace. The pharmaceutical industry, for example, is facing increasing regulatory scrutiny due to rising drug prices, necessitating a strategic approach to regulatory compliance. Banks, on the other hand, are grappling with regulatory scrutiny around fintech partnerships and compliance with anti-money laundering rules. Meanwhile, for many manufacturing companies, including automakers, gaining a stronger grasp of the semiconductor ecosystem has recently become a paramount concern. Increasingly, the pace of change means that global companies will need partners who can make the connections between industry-specific business models and emerging hardware and software capabilities. Selecting the Right Partner for the Digital Journey Today's business climate is both fastpaced and unpredictable. To manage new upheavals, global enterprises need to ensure that their digital partners not only "talk the talk" but also "walk the walk." The right partner will be ahead in the innovation game and cater to each customer's unique needs with customized solutions that use technology to drive core business objectives. A strong digital partner will be clear about expectations, leverage advanced CRM platforms for seamless customer interaction, and advocate for self-service technology options. Finally, a digital partner's processes and approaches should be flexible enough to drive value while accommodating ongoing disruption. The ultimate objective of digital transformation is not just to replace old tools with new ones. Digital transformation is about redefining business models, reimagining processes, and re-engaging people. Digital partners should be enablers of organizational metamorphosis, bringing enduring value, empowering organizations to face future challenges, and preparing global enterprises to be pioneers in their industry.

## Cloud Economics: Driving Business Value Through Discipline

---- Arcticle source ---- https://www.wipro.com/blogs/santanu-kumar-patro/cloud-economics-driving-business-value-through-discipline/ ---- About the Author Contact Wipro Please fill the required details to access the content Cloud Economics: Driving Business Value Through Discipline August | 2023 It's an unfortunate reality that many cloud migration programs fail to deliver the intended results the first time around. An estimated one third of cloud spending goes to waste, with 13% of projects, on average, going over budget. Businesses set out to increase efficiency by going all-in on cloud, only to find that critical applications are too complicated or impossible to migrate, forcing them to put the project on hold while they revise their strategy. With businesses investing so much time and money in cloud migration programs, why are the returns so often lackluster? What are the cloud leaders doing to make their programs so successful? The answers lie in cloud economics. Cloud economics is a strategic approach to managing

technology investments that emphasizes cost-benefit analysis as a way to deliver real business value rather than simply cut costs. Businesses approach cloud transformation as a business transformation, answering core questions such as: How will this new technology impact the business? What value does it offer and what will that value cost? What kinds of changes are necessary to accommodate a cloud transformation? With cloud economics, businesses still identify key ROIs and metrics (cost cutting, for example, or increased efficiency), but the focus is on learning new ways to manage resources, teams, operations. This cross-functional aspect is what really sets cloud economics apart from more cost-centric cloud strategies. Through cloud economics, finance, technology, and business teams collaborate to maximize business value, learning how to reallocate resources and adjust cloud consumption in line with business strategy to deliver the desired ROI. By contrast, many traditional cloud migration programs focus solely on the benefits of moving to the cloud — and those benefits often only focus on cost. Businesses see moving to the cloud as a way to cut costs or increase efficiency. They see other organizations moving to the cloud and posting major returns on investment, increases in operational efficiency. In effort to keep pace with these other organizations or get a leg up on their competition, businesses go all-in on cloud, shifting everything as fast as possible, seldom stopping to consider the cost of these investments, whether the returns they're after are even possible. Eventually they hit a wall. Maybe some critical applications are not transferable to the cloud or the translation is more complex than they expected. Progress stalls, efficiency slips, and cost increases as the company extends itself over legacy on-premises systems and the cloud. Moving from on-premises data centers to the cloud, for example, involves a lot of financial considerations, such as the movement from CapEx-heavy asset-based architecture to OpEx-heavy as-a-service models. Moving to the cloud can also require new ways of working, training for staff, hiring more people with specialized skills. By applying cloud economics to the cloud migration strategy, businesses can take a more holistic approach to address these other aspects of cloud migration, working across various functions such as Finance, HR, IT, Sales, to go beyond merely optimizing costs to truly maximize the business value of cloud computing. Not All Cloud Strategies are Created Equal While upfront planning is important, sometimes it's not enough. Businesses often forecast cloud spend based on historical data and existing ways of working. This backward look can prevent the company from taking full advantage of all the cloud has to offer because the business is considering how the cloud can improve existing operations rather than how operations will change with cloud and what's needed to support those changes. The emphasis on cost-benefit analysis through cloud economics is especially important when venturing into unknown territory. Businesses need to be sure they're investing appropriately, taking necessary risks while avoiding unnecessary ones. Data center exits are a great example of the kind of balance businesses need to strike with cloud strategy and how difficult it can be. Because hybrid and multi-cloud data centers can be more affordable, accessible, scalable and efficient than physical data centers, not making the switch as soon as possible can seem like throwing money away. But there are potential costs associated with data center migrations that may not be immediately obvious, such as how new pricing models could affect the business model, or increased downtime as employees and customers adapt to new applications

or operations. A cost-benefit analysis can help the business work through these considerations and break down the entire cloud migration into stages, then prioritize those stages to maximize ROI and guide investments based on returns. As the project progresses, cloud economics can help the business adapt to new challenges by reallocating resources accordingly, such as slowing investments in one area to prioritize another that has become more urgent, or pushing ahead despite challenges because what seems like a rough patch now aligns with the business' larger goals. From Reducing Costs to Maximizing Value Cloud economics encourages businesses to look deeper and further ahead, beyond cost-reduction and short-term goals to consider the underlying business interests to such goals and the steps necessary to achieve them. How can the business be more efficient? What changes are necessary? Will switching to cloud support those efforts, or is some other technology better suited for the task? These questions shift the focus from reducing costs to maximizing value. By identifying the business goals and the cost of those goals, the business teams are able to make more informed decisions about what's truly best for the business. Wipro FullStride Cloud uses cloud economics when working with clients to create a holistic cloud strategy that focuses on how to maximize the value of cloud computing to drive specific business outcomes. This is a cross-functional process, using FinOps to maximize business value throughout the organization and its cloud environment. By creating a tailored approach for each company there is opportunity to identify areas of overspending and opportunities for efficiency, enabling them to find opportunities for reinvestment in other areas. This requires analyzing where change needs to take place including identifying how various areas of an organization should work together, breaking down silos. For example, Wipro led a cloud cost optimization and avoidance advisory for a client with all workloads already migrated to Azure Cloud. By increasing cost visibility and defining priorities for cost optimization, the client was able to implement smart shut-downs and start-ups, which helped increase efficiency and reduce costs by 28% per week on average. Another client, a leading German energy company, was able to avoid an additional \$3 million per year in cloud spending by reducing its Azure consumption and resizing its cloud infrastructure. Whether businesses are just starting a cloud migration, reevaluating their approach, or looking to maintain the success they are achieving, cloud economics is an essential strategy because it keeps the business focused on the costs and the benefits of the program. These factors will change in time, so it's important that businesses continue to monitor their investments and their goals in the cloud, and adjust their approach as needed to strike the desired balance. Santanu Kumar Patro General Manager & Practice Head - Cloud Economics, Wipro FullStride Cloud Advisory and Consulting Santanu Patro has about 20 years of experience in IT and close to 15 years' experience in Advisory & Consulting. Being a techno-evangelist, he has been developing future ready solutions/services to meet the ever-changing requirements of an enterprise and leading a team of IT therapists to solve enterprise challenges. Co-Author Sudin Somachandran Partner - FullStride Cloud Advisory and Consulting Sudin leads IT Strategy and Advisory for FullStride Cloud Advisory and Consulting Practice. He has 15+ years of experience in leading IT and Business Strategy Consulting. As a strategist, Sudin looks to understand what is behind the curtains and come up with innovative solutions to resolve

### A New Generation Emerges in India's Evolving Payment System

----- Arcticle source ----- https://www.wipro.com/blogs/vijay-mahadevan-iyer/anew-generation-emerges-in-indias-evolving-payment-system/ ---- Contact Wipro Related Blogs For a successful BFSI cloud transformation, build your complex landing zone right Modernizing the Core Banking System: Enabling the Future How leveraging a digital adoption solution can help reinforce the assurance of quality Please fill the required details to access the content A New Generation Emerges in India's Evolving Payment System India's payment journey has changed significantly over time. What started as a barter system has evolved into cashless payments. From bartering to credit and debit card payments to one-click transactions using payment applications, India has come a long way in its payment journey. And while many people began using new contactless payment methods like Unified Payment Interface (UPI) even before the pandemic, its use has substantially increased after the lockdown. With digital payments gaining market share in India, in August 2020, the Reserve Bank of India (RBI) published a framework to authorize the pan-India Umbrella Entity for retail payments. The framework challenges the dominance and monopoly of the National Payments Corporation of India (NPCI) and encourages growth and innovation in the payment ecosystem. While these changes will bring more options to consumers, they will add more competition in the banking/ financial services industry. But changes in payment systems are not the only pressure that banks face. The global trade finance market is poised for robust growth, with forecasts indicating rise from US \$4.16 trillion in 2023 to an estimated US \$5. trillion by 2028. This sector is growing, thanks to digital interventions and changing corporate needs. The current fundamental upheaval in global trade and commerce requires banks to digitize efforts to make end-to-end connectivity a reality. The dynamic environment requires banks to rethink and rebuild for the future. As a result, payment systems, customer experiences and the financial services

industry, in general, will undergo radical changes in the coming years. A New Generation of Payments With the acceleration in market demand, big technology companies and non-banking players are entering the field of digital payments. The expanding digital infrastructure, rapid migration to digital-driven payments by UPI, the rise in customer preference for contactless payments, increased adoption of digital payments by merchants, and big tech and fintech disruptions will continue to drive the rapid digitalization of payment systems in India. Even messaging apps have started to offer payment services. Currently, Google, Amazon, Facebook, Apple, Samsung and Alipay are players at the forefront of the digital payments industry. The influx of non-bank additional players, including tech start-ups and technology behemoths, adds more competition for banks and pushes them to invest in infrastructure that combines blockchain, machine learning, and artificial intelligence to offer customers innovative and customized solutions. Blockchain technology efficacy The traditional method of cross-border payments is riddled with fees, roadblocks, and delays. Blockchain technology can interconnect financial infrastructure across the world. Blockchain enables quick, safe, affordable international payment processing services using encrypted distributed ledgers that offer secure real-time verification of transactions without the need for intermediaries like correspondent banks and clearing houses. As more firms and governments invest in these fields, there is a growing level of confidence in blockchain technologies. The advantages of blockchain in the digital payment world includeCentralized record keeping Artificial Intelligence and Machine Learning Banks have traditionally been at the cutting edge of using innovations to support front-end and back-end operations. In today's era of AI and ML, banks leverage these technologies to increase operational effectiveness and reduce business risk, as these technologies offer rapid, effective, and secure risk management, customer service, data analysis and credit card fraud detection. Additionally, it can assist businesses in creating solid dynamic models that are better equipped to categorize defaulted loans and even recognize self-cure clients. Organizations require tools and standardized protocols to develop, evaluate, deploy, and monitor models in a repeatable and industrial manner to leverage various analytics and advanced technologies. Banks should have a centralized data backbone. If data is the bank's fundamental resource, it must be governed and made secure to allow customers to analyze data sources in real time. What to Consider When Updating Payment Systems The financial payments landscape in India and throughout the world is changing. Participants must revamp their payment systems to adapt to the changing market landscape. New systems must address many complicated issues, including: With Opportunity Comes Complexities The payments industry is undergoing massive shifts due to new technologies, rising expectations, integration with other industries, and skyrocketing digital adoption. Not only will payment systems and customer experiences experience a radical change in the coming years, but also financial services in general. Banks should anticipate a steady increase in fintech entering the market, increased customer data monetization, and competing businesses taking a more user-centric stance in response to the growing desire for contactless and expanding digital payments. While payments are getting faster, simpler, and more secure, the sector is becoming more complex. IT Service Providers can assist clients in transforming or realigning to

emerging business models and payment economics with a new operating model and cost structure. The financial services industry must modernize and simplify its payment technology infrastructures as it will improve the cost base and operational efficiency, enhance agility, and reduce risk. Wipro is already playing a vital role in the payment industry by investing in the infrastructure that combines blockchain, machine learning, and artificial intelligence to offer clients innovative and customized solutions with compelling and differentiated value propositions. While the rapid change in the industry opens many opportunities, there are complex issues to navigate. Technology firms like Wipro are helping clients embrace the paradigm shift in the payments space to implement a future-ready payment solution. Industry: About the Authors Vijay Mahadevan Iyer Partner, Consulting-Financial Services, and Head, India Domain & Consulting Practice, Wipro Limited Vijay has 20+ years of experience in Business, Technology, and Solution Consulting with Pre-Sales and Product Management in the BFSI segment. He has anchored and successfully delivered large-scale digital banking transformation engagements in India, Southeast Asia, the UK, Europe and the US. Vijay's skills include Digital Transformation, Core Banking domain, industry-specific issues and business models. Nisarga C S Consultant-Financial Services, Wipro Limited Nisarga is a solution-driven engineer who analyzes trends and data-driven solutions to produce quality outcomes, successfully delivered RFPs and PoVs for various clients, and executed PMO-led services for one of India's leading banks. Migrating your data and services to a public cloud service like Google Cloud offers multiple advantages, including increased flexibility and agility.... Traditional banks are reinventing themselves to meet rapidly evolving customer expectations, Emerging technologies are transforming the landscape of today's BFSI industry at the speed of light. Applications leveraging artificial intelligence (AI), machine learning (ML), blockchain, and robotic process automation are changing the face of banking operations 

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#### How GenAI Can Supercharge the Publishing Industry

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personalized experiences that cater to the diverse needs of users. Along the way, frameworks for responsible implementation and ethical use will help facilitate productive relationships between human creators and emerging GenAI capabilities. Continuous GenAI training and development will also be crucial. The aforementioned use cases are just a starting point; as AI and GenAI evolve, new game-changing applications will emerge, and publishers need to be prepared to understand and deploy them in a way that drives value and increases access to content and knowledge. About the Author Aditya Viswanathan Director - Media and Information Services, Wipro Limited Aditya leads Media and Information Services for Wipro, where he drives transformations and delivers value for his clients. With over 20+ years of experience in the IT services industry, Aditya focuses on growing partnerships and managing client relationships across his sectors. With his vast experience across media, information service providers, learning science, and education companies, Aditya brings in multidimensional experience. Before joining Wipro, Aditya was in various large SI companies in key roles in Delivery, Sales, and relationship management.

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### How GenAI will Transform the Media Landscape

----- Arcticle source ----- https://www.wipro.com/blogs/aditya-viswanathan/ how-genai-will-transform-the-media-landscape/----- Contact Wipro Please fill the required details to access the content How GenAI will Transform the Media Landscape Across both operations and customer experience, GenAI will bring radical changes to all media enterprises Even before the lightning bolt of ChatGPT, the winds of change were already sweeping through the media industry. Streaming giants and established players have been navigating a dynamic landscape shaped by audience fragmentation, content saturation, and the ever-evolving battle for attention. In this environment, the primary strategic struggle is to create compelling customer experiences with unprecedented efficiency. That's where Generative AI (GenAI) enters the scene. GenAI offers media companies a game-changing toolkit that will empower them to revolutionize their operations and captivate audiences. This fast-moving technology can generate original content, personalize experiences, and optimize workflows, and it holds the key to unlocking new levels of efficiency and engagement. Why Media Giants are Turning to GenAI Content volume has exploded, platforms are proliferating, and audiences continue to fragment. These trends are straining the resources of all major media companies. As they seek new avenues to efficiently create and target content, GenAI will bring new capabilities across the entire spectrum of media production, from social media to live broadcasts and feature films. Every day, GenAI is being used in new ways to automate repetitive tasks like script generation, animation, and music composition. While GenAI is not likely to produce a critically acclaimed streaming series anytime soon, it is already making an impact on short-form content. Increasingly, it will be able to automate many simpler media assets, freeing media professionals to focus on marquee assets and high-priority creative

projects. The technology is also well-suited for efficiently delivering the personalized experiences that consumers now expect. Audiences crave tailored content, and GenAI can analyze user data to generate personalized recommendations, translate content in real time, and even dynamically adapt content based on individual preferences. As it further automates the journey toward media hyper-personalization, GenAI will also significantly reduce costs and improve turnaround times. As it streamlines production workflows and automates tedious tasks, it will give AI-enabled media companies a competitive edge. GenAI for Efficiency Traditional media including audio and video streaming companies, PR firms, and production houses — are locked in a relentless competition driven by subscriptions and ad revenue. They need to produce compelling content and take reasonable risks while also achieving healthy margins. GenAI will contribute to strategic cost reductions by improving back-office efficiencies. The key levers will be: GenAI for Customer Experience For media companies, efficiency alone is meaningless. In the end, they need to engage audiences. Here, too, GenAI brings numerous exciting capabilities to the table, such as: The Transformative Power of GenAI in Media The transformative power of GenAI is poised to revolutionize the media industry, enabling media companies to respond to the challenge of content oversaturation, deliver hyperpersonalized experiences, supercharge data-driven decision-making, and achieve remarkable new operational efficiencies. GenAI brings a truly gamechanging toolkit, and the media companies that fully leverage this toolkit will gain a durable edge in a highly competitive market. About the Author Aditya Viswanathan Director - Media and Information Services, Wipro Limited Aditya leads Media and Information Services for Wipro, where he drives transformations and delivers value for his clients. With over 20+ years of experience in the IT services industry, Aditya focuses on growing partnerships and managing client relationships across his sectors. With his vast experience across media, information service providers, learning science, and education companies, Aditya brings in multidimensional experience. Before joining Wipro, Aditya was in various large SI companies in key roles in Delivery, Sales, and relationship management.

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#### Reimagining Information Services with Generative AI

---- Arcticle source ---- https://www.wipro.com/blogs/aditya-viswanathan/reimagining-information-services-with-generative-ai/ ---- Contact Wipro Please fill the required details to access the content Reimagining Information Services with Generative AI GenAI's ability to process and personalize information will completely reorient information services offerings. The information services industry, a haven of curated data and analysis, is contending with a mixed blessing: information is abundant, and yet that information can also be overwhelming. Manual processing and traditional analysis methods are becoming obsolete. Clients demand faster insights across ever-wider datasets. At the same time, they also experience user fatigue due to information overload, leading to decision paralysis.

Users of information services need tools that curate, synthesize, and personalize insights, guiding them towards actionable intelligence. At the same time, there is a competitive squeeze. New entrants are disrupting the market with agile, AI-powered solutions. Legacy players must adopt cuttingedge technologies to differentiate themselves and retain their value proposition. On this front, GenAI will be a powerful ally in navigating the data deluge. Unlocking Potential with GenAI The information services industry can utilize GenAI to automate content processing, personalize insights, enhance user experiences, and accelerate innovation. GenAI will ingest and analyze vast datasets to extract key insights and trends at machine speed, and share those insights in a legible way without a human mediator. The technology will leverage user data and preferences to tailor reports, alerts, and recommendations for each client's needs and interests. It will also enable more robust self-service. While chatbots are not new, GenAI-powered chatbots will be significantly more intelligent and responsive, providing 24/7 support and reducing wait times. Finally, GenAI will accelerate innovation by generating new content formats, exploring novel research avenues, and automating tedious tasks, allowing information services companies to innovate faster and stay ahead of the curve. GenAI for Internal Efficiencies Many GenAI use cases for information services will make the collection, analysis, and dissemination of information more cost effective. These use cases include: GenAI for Enhanced User Experiences Even as they maximize efficiency with GenAI, information services providers need to ensure that their products (such as subscriptions to research reports or journals) continue to engage users. Meaningful experiences lead to customer loyalty. GenAI will open up many new avenues for delivering data and insights, such as: GenAI and the Future of Information Services In the information services industry, GenAI is emerging as a transformative force, offering solutions to the prevalent challenges of content explosion and user fatique. GenAI will empower companies to deliver meaningful, tailored information to their clients and reimagine how information is curated, analyzed, and delivered. By embracing GenAI, information services providers can expand their audiences, deliver more value, and stay competitive in an evolving market. About the Author Aditya Viswanathan Director - Media and Information Services, Wipro Limited Aditya leads Media and Information Services for Wipro, where he drives transformations and delivers value for his clients. With over 20+ years of experience in the IT services industry, Aditya focuses on growing partnerships and managing client relationships across his sectors. With his vast experience across media, information service providers, learning science, and education companies, Aditya brings in multidimensional experience. Before joining Wipro, Aditya was in various large SI companies in key roles in Delivery, 

## The New Private Equity: Creating Value Quickly and Reliably Through Digital Transformation

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some time. When was the last time your portfolio company thought seriously about the future, beyond making next month's payroll? DO DON'T Reinvent for the future Optimize for the past Embrace a robust cloud platform strategy Hold on to your legacy assets Map out your entire technology infrastructure, both internal and with partners Dismiss the tech infrastructure as "just the plumbing" Aggressively weed out "inherited inefficiencies" Forget that combining inefficient companies inevitably creates a tangle of redundant and inefficient tech and processes Go assetlight: shed non-core IT assets and/or back-office operations Ignore substantial recurring cost savings that often lurk in the dark Consider a shift to online commerce Assume only existing sales channels can drive significant revenue Create online digital marketplaces to expand your portfolio company's geographic reach and service clients worldwide Assume the company cannot expand its total addressable market Create new buying experiences for customers based on AR/VR technologies Assume buyers will buy the way they did before the pandemic Embrace new global digital-based supply chains Settle for more aggressive terms with existing vendors in the supply chain Look for value-creation in IOT and sensor-data analytics Overlook substantial data assets the company may create in its normal course of business that may not be captured today Monetize in "passive-IP" Ignore hidden assets that could be of potentially much more value to someone else Seek investment opportunities in sleepy industries that have good fundamentals but have not seen innovation in a long while Miss out on undervalued "ugly ducklings" Step II: Focus on the Big Three: Business Operations Optimization, Technology Modernization, and Sale & leaseback of non-core assets Modern PE companies, like legacy PE companies, remain laser-focused on where the money is. In today's enterprises, the most powerful levers to shrink cost or drive revenue fall into three key areas. Business Operations Optimization In the course of working with 1,000+ large Enterprises, Wipro has built an unparalleled and hard-won knowledge base of where to look first for value. Wipro has developed industry-leading 'golden process maps' for top PE firms. These are used to benchmark operations performance against the processes of the best in the industry. Significant wins can be gained by maximizing throughput and efficiency while minimizing cost by managing centralized, automated and digital shared services organizations that are right-shored to enhance internal and external customer experience. You probably already know that Artificial Intelligence and Automation infused within transformed processes can significantly bring down costs and improve the process' productivity multifold. But the biggest challenges faced by customers in AI and Automation are what the technologies can do for them, how they can get past the adoption hurdles, and how to achieve non-linear growth in speed, scale, and agility. Wipro's HOLMES platform enables out-of-the-box value extraction from many processes. What's more, Wipro's Automation and AI portfolio extends beyond the range of solutions that HOLMES platform offers. We provide vendor-neutral advisory services and prebuilt solution assets on ecosystem partner marketplaces. We help PE firms identify the right business problems, define success criteria, evaluate the best technologies, smooth implementation and adoption, risk and change management and governance. WHAT BUSINESS OPERATIONS OPTIMIZATION CAN DO FOR PE A leading PE firm turned to Wipro to help one of its portfolio healthcare companies to streamline processing claims

and attend to member calls. We're rapidly modernizing digital operations leveraging Hyper Automation, AI, and Process Reengineering to: IMPACTS: Cost Savings | Staff Reduction | Improved Customer Satisfaction | Reduced Customer Churn Technology Modernization As software becomes pervasive, it is imperative for organizations to view technology as a critical business driver. Taking an end-to-end modernization approach with design-led thinking can provide an enterprise with a significant competitive edge and place it on a path of growth. Wipro's acquisition of design houses like Designit & Cooper Education, and subsequent integration into our digital business unit, uniquely enables enterprises to combine design-led technology modernization that are aligned to improve customer experience, employee experience, and enhance value of the organization. Technology built on microservices and Kubernetes makes it scalable, re-usable and highly flexible. In addition, platforms that enable low-code / no-code features allow business users to access technology seamlessly. In many cases, smart modernization efforts can transform cost structure from capital expenditures to variable expenditures. When workloads start moving on cloud and capabilities are sourced using a crowd rather than large permanent teams, everything changes. For example, leveraging crowd sourcing platform Topcoder can move application development, testing, design, and data science talent acquisition to variable cost structures. Giving your portfolio companies the ability to ramp up and ramp down guickly on an as-needed basis boosts agility and improves financial performance. WHAT TECHNOLOGY MODERNIZATION CAN DO FOR PE A leading PE firm bought the Baking, Cooking, and Spreads business from one of the largest CPG companies in the world. Wipro worked closely with the PE firm and its portfolio company on the greenfield IT set up, which resulted in a right-sized retained global organization predicated on a highly outsourced operating model, focused around HO and shared services in India. Wipro leveraged its deep IT and business transformation capabilities to deliver value across Applications, Infrastructure (including hosting a new SAP S4/Hana system in the cloud), Integration of overall landscape, Operational data services layer and Analytics. As a direct result, the PE firm and its portfolio company enjoyed the business benefits of an Intelligent Enterprise with improved agility and an early exit from the TSA (Transition Services Agreement). IMPACTS: Improved agility | Intelligent Enterprise | Improved Customer Data for Marketing, Personalization, and CRM Sale & leaseback of non-core assets Sale & leaseback of Information Technology and Business process services is a way to offload a portfolio company's IT and business process assets (and teams) from their books and consume it back as a service. This may be a captive center, data center, or a department/team within the shared services organization of the portfolio company. Every modern PE firm we know looks at key levers like global talent (right-shoring), process simplification, the movement to the cloud, and hyper-automation. But obviously, these must be applied at scale to gain maximum benefits — which may not be possible within the technology and operations landscape of a single enterprise. The answer? Consume what would be considered non-core to the business as a service, instead. For example, why hold on to a Data Center as an asset when it can be converted to the monetary value in return for best-in-class scalable technology? Azure, AWS, and Google Cloud can all enable powerful growth with rock-solid stability. If you're looking into shedding assets, Wipro will work with you before you acquire the company,

at no cost to you. We will not only help you identify assets to shed in advance, but will sometimes agree to buy that asset, creating upfront monetized value for you. We know you're competing hard against other PE firms. Our mission is to help the firms that work with us win. WHAT SALE AND LEASEBACK OF NON-CORE ASSETS CAN DO FOR PE A leading PE company took an entirely innovative approach to partnering with Wipro with its portfolio company, a leader in technology-enabled health, wealth and Human Capital Management (HCM) solutions. Rather than a typical clientvendor approach the relationship explores strategic opportunities and portfolio alignment spanning both organizations. For example, Wipro acquired the India captive center of the client and transferred 9,000 staff onto its books. Wipro also assumed responsibility for the services delivered from the firm's India locations, while the PE portfolio company acquired Wipro's Workday and Cornerstone OnDemand businesses for a combination of cash and deferred consideration payable at the end of 12 months based on Wipro's ability to hit performance targets. IMPACTS: Unmatched Technology Agility | Asset Monetization & Hyper Automation | Core Product Improvements | Step III: Work with partners who know PE Wipro works with 7 of the top 10 PE firms in the world, including Alight (Blackstone) and Magneti Marelli (KKR/Calsonic). We work with about 80 companies worldwide that are part or wholly owned by PE companies. Most of this work is based on structured contracts to provide both support and digital transformation services in order to help accelerate their exit from the investment with desired multiples. Key Takeaways THE NEW PRIVATE EQUITY THE NEW PRIVATE EQUITY WORKS WITH WIPRO Industry: Aswatha Amarnath (Amar) Senior Vice President and head of Global Sales Operations, Wipro Aswatha Amarnath (Amar) is a Senior Vice President at Wipro and is head of Global Sales Operations. He has three other global responsibilities: 1) he leads Wipro's efforts in helping pre-IPO companies and Unicorns scale; 2) he leads Wipro's business portfolio with Private Equity owned firms; and 3) he heads Wipro's Silicon Valley Innovation Center (SVIC) in Mountain View, California. This center is a crucible of next generation digital and industry showcases across 30 sectors. Online purchases are on the rise, and with them, so are fraud and disputed payments. When we look back at the COVID-19 pandemic of 2020, we will see not just the human and economic loss inflicted by the virus, but an important gain - a growing global awareness of the value of trust. The Global Capital markets is still recovering from the 2008 crisis; the regulatory burden has sapped the energy out of capital markets. In US alone, Wall Street is seen as the quagmire for gambling and loss by political pundits, however significantly, capital markets fund 65% of the US economy therefore the dependency on capital markets as whole is something that cannot be ignored ===============

#### Unlock the power of AI with 360° visibility of Business and IT

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Wipro Please fill the required details to access the content Unlock the power of AI with 360° visibility of Business and IT People, process, technology, and beyond In today's rapidly evolving digital landscape, businesses must continually innovate to stay ahead of the competition. Managing and operating a complex enterprise digital environment requires scalable and reliable application architectures to meet business demands. The rise of cloud-enabled hybrid IT environments and modular microservices has added new layers of complexity. These dynamic IT systems, designed on microservices and API frameworks deployed in hybrid IT environments, need a focused view on their changing behaviours to meet business needs. Mere monitoring provides availability without deeper insights or traceability of performance bottlenecks. One of the most transformative advancements is the integration of Artificial Intelligence (AI) to gain a comprehensive, 360degree view of both business operations and IT infrastructure. By harnessing AI's potential, organizations can unlock new levels of efficiency and insight. This narrative explores how enterprises can gain deeper insights into potential performance issues in IT and business operations and use these actionable insights to eliminate performance issues through Wipro's Applied Observability Automation (AOA) framework. Achieving comprehensive visibility with Wipro's AOA framework With over four decades of experience in managing IT operations, Wipro has designed the AI-driven Applied Observability Automation (AOA) framework. This framework provides comprehensive, integrated 360° visibility across technology stacks and business systems, addressing key customer challenges: Wipro's AOA framework is built on four key principles: Partnering for success: Wipro and Cisco A robust partner ecosystem enhances outcomes. Wipro partners with Cisco to drive the adoption of Observability in enterprises. Cisco's Observability products, combined with Wipro's time-tested AOA framework, amplify and simplify the implementation of Observability solutions. Key technologies include: Unlocking zero-touch operations AOA is a comprehensive solution designed to prevent downtime, reduce security vulnerabilities, and maintain continuous performance. Leveraging AI, ML, and GenAI, AOA identifies issues and implements intelligent automation, ensuring real-time reliability of digital operations, microservices, cloud computing, and other critical tech stack components. AOA enables composability through data collection and analysis, 'Observability as Code,' and orchestration, supported by core solution components: AOA includes several accelerators to help enterprises overcome Observability and automation challenges effectively: By leveraging Cisco's AI product capabilities, Wipro ensures customers can unlock operational efficiencies, enhance user experiences, and drive sustained business growth. The results include: Customer: Canadian Pipeline & Energy multinational Technology: Embed AI Process: Unified digital operations center and enterprise AIOps (Artificial Intelligence for IT Operations) platform. Outcome: Customer: American Multinational Consumer Electronics Retailer Technology: Core AI Process: ML model to scan incoming tickets & create a major Incident when ticket volume crosses the static threshold. Outcome: Step up your observability with a wellrounded framework Unlocking the power of AI with 360-degree visibility is about transforming organizational operations. By integrating AI into business processes, enhancing IT operations, managing data effectively, fostering collaboration, and focusing on continuous improvement,

businesses can achieve unparalleled insights and efficiencies. Embrace the AI revolution and watch your organization thrive in the digital age. Wipro AOA creates numerous opportunities for customers to ensure real-time resilience and realize business value. With these solutions, businesses gain control and flexibility to achieve unique objectives, ranging from capacity forecasting to proactive actions, while minimizing infrastructure and operational costs. About the Authors Anitha Irisappan VP & Automation Head , Wipro Application Managed Service A veteran IT leader with 30+years of experience in IT delivery and product engineering, Anitha is a pioneer in IT process consultancy. Adarsh Devendraswamy GM & Practice Head , AIOps and Wipro HOLMES A business technology executive with more than 20 years of experience, Adarsh brings expertise in data transformation, traceability, observability automation frameworks, and AIOps strategy. He leads a global team of more than 300+ consultants.

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#### Maximize the Digital Opportunity of Your Shelf Space

----- Arcticle source ----- https://www.wipro.com/blogs/uday-kiran/maximizethe-digital-opportunity-of-your-shelf-space/ ---- Contact Wipro Please fill the required details to access the content Maximize the Digital Opportunity of Your Shelf Space Add to the in-store experience by leveraging dynamic advertising touchpoints The tides are shifting for the retail industry, revealing new opportunities through in-store digital connectivity and dynamic media networks. Despite the surge in eCommerce over the last several years, 80% of all shopping still happens in stores. Customers returning for in-store shopping are driving the future of retail technology. Meanwhile, although in-store retail media ad spending is expected to exceed \$1 billion by 2028, that value accounts for less than 1% of total omnichannel retail media ad spending. In this evolving landscape, the key to success for brands lies in integrating the in-store experience with digital networks, making every visit to the store a part of a larger, connected journey. To access additional revenue streams, retailers must maximize their in-store digital assets and adopt innovative advertising strategies near the point of purchase, enabling a full-funnel, omnichannel retail media networks (RMN). What's driving the growth? Brands still favor in-store retail media networks to meet the demands for closed-loop measurement and first-party customer data. Brands have greater control through these networks, enabling them to better assess the impact of ads and maximize ROI. Digital platforms and instore displays have become the preferred mediums to expand RMNs beyond online and mobile advertising and truly embrace omnichannel capabilities. This includes repurposing data collected across channels to improve engagement and tailor messages to shifting audience demographics. Tapping into new opportunities and use cases Retailers can create highly effective in-store advertising environments that drive ad revenue while enhancing the overall shopping experience by tapping into: Unlocking the true potential of RMNs In-store retail media networks offer a versatile platform for retailers, far beyond a simple one-dimensional approach. To

leverage the full capabilities of RMNs, retailers must adopt a holistic strategy that includes unified approaches, strategic display placement, engaging content, and the right implementation partners and technologies. Integrating dynamic creatives, A/B testing capabilities, and advanced technologies such as AI-powered video intelligence, programmatic advertising, and an ad measurement tool paired with leading IP camera technology, enables retailers to effectively utilize in-store RMNs. For instance, an AI-driven AdPool solution for programmatic advertising can provide high-fidelity impressions and engagement analytics to measure and optimize digital out-of-home (DOOH) media and merchandising campaigns in real time, increasing revenue and future-proofing digital advertising. Leading the retail media revolution Dynamic digital platforms and displays will continue to serve as valuable gateways for retail media, allowing businesses to achieve a full-funnel effect for the foreseeable future. These tools enable retailers to offer omnichannel experiences by seamlessly integrating online and offline interactions. They also allow retailers to deliver more personalized content and enhance customer engagement. Solutions like Wipro VisionEDGE empower stores with a robust retail media network solution to transform the in-store experience and brand advertising. Through digital signage, enterprise networks, IP cameras with crowd analytics, system integration, and managed services, these solutions transform digital assets into immersive experiences. The future of retail hinges on adaptability and innovation. Digital advertising within physical stores is crucial for retailers aiming to stay ahead. By integrating technology and strategic advertising, businesses can enhance customer experiences and tap into new revenue streams, ensuring their place in the evolving retail landscape. About the Author Uday Kiran Uday Kiran, Head of Cisco BU and Strategic Partnerships Bringing 25 years of technology leadership, Uday excels in strategic partnerships and 360° relationships with large enterprise customers across multiple GEOs. Renowned for his thought leadership in Integrated Domain Solutions, he drives customer satisfaction initiatives and implements transformative delivery models. Uday specializes in transitioning large and complex engagements involving globally distributed teams, fostering process excellence. His expertise extends to front-ending large deals and crafting multi-year account growth strategies, driving business expansion and innovation. =================

# From GenAl to ROI - Six simple steps to derive maximum value from GenAl at enterprise scale

----- Arcticle source ----- https://www.wipro.com/blogs/sandhya-arun/fromgenai-to-roi-six-simple-steps-to-derive-maximum-value-from-genai-atenterprise-scale/ ---- Contact Wipro 1. Form an Enterprise AI Steering Committee 2. Onboard a Transformation Advisor 3. Conduct a GenAI Readiness Assessment and Develop a Plan 4. Take an Ecosystem View 5. Set Up a GenAI Champion Squad 6. Establish a GenAI-First Culture Building a Responsible Future: Incorporating AI Regulations in AI Systems Wipro highlighted as a product leader in Gartner® 2024 Emerging Tech: Services Innovation Using AI Technologies Empower Your Enterprise with Wipro ai360 AI Services Please fill the required details to access the content From GenAI to ROI - Six simple steps to derive maximum value from GenAI at enterprise scale Our perspective "Riding the GenAI wave demands a fundamental transformation in how enterprises operate and innovate." As enterprises grapple with the rapid advancement of Generative AI (GenAI), leaders find themselves at a crossroads, just as they did amid previous technological revolutions. The difference this time is the unprecedented velocity and scale of GenAI adoption. Instagram's journey to 100 million users in 2.5 years was a considered a digital marvel, yet ChatGPT shattered this record by achieving the same feat in just six weeks. This scale of adoption is an indication of the transformative potential of GenAI in business. Consumers enjoy the perks of GenAI for tasks like homework, music creation, art, and general creativity without much complexity. Enterprises, on the other hand, face a more complex landscape filled with immense opportunities and significant challenges. In the business world, finance departments are leveraging GenAI for revenue forecasting and detecting leakage. HR is using GenAI to boost employee engagement. R&D departments are accelerating research with GenAI's rapid data processing and sense-making capabilities. Marketing teams increasingly rely on GenAI for content generation and personalized customer interactions. GenAI use cases are permeating all corporate functions and lines of business. However, the return on investment (ROI) from these ubiquitous GenAI initiatives remains elusive for many. This often stems from an unbalanced focus on rapid proofs of concepts. They solve immediate problems, without a broader strategic perspective. To fully capture the value of GenAI, it's essential to broaden our approach to a comprehensive view that encompasses enterprise value chains, the larger industry value network, and the surrounding ecosystem. Consider the retail and consumer products sector as an illustrative example. Companies now have access to vast amounts of data about customer buying patterns found in both private and public datasets. Retailers can aggregate candid product reviews and consumer advice

scattered across YouTube, Reddit, TikTok, blogs, and numerous forums. The insights from both verified influencers and everyday consumers resonate worldwide through various external social platforms. Data on global inventory levels, distribution logistics, and product returns are available across the value network. But how are these disparate datasets being used to drive more precise and forward-looking decisions within the merchandizing and procurement organizations? Are these datasets being used to collect feedback for product design improvements and enhancements? While it might be humanly impossible to achieve such precision, speed, and scale of intelligent action, GenAI agents are ideal for empowering employees and helping businesses derive value from seemingly disparate opportunities across value networks. This wealth of information provides the potential to develop near-omniscient GenAI agents capable of supporting functions across customer service, sales, operations, and beyond. Unfortunately, many of the promising GenAI proofs of concept (POCs) fail to progress to full-scale production due to their narrow focus, limited datasets, and isolated application. Usually, ROI fails, funding runs out, and the POCs are shelved. Small-scale, free-form GenAI playgrounds are an important initial step to introduce the new technology across the enterprise, and they are needed to foster a culture of innovation. However, POCs need a path for scaling into production and achieving a wider field of impact. The success of enterprise GenAI programs is dependent on leadership alignment, an outside-in perspective, IT readiness, agility in execution, and responsible adoption. Here are six simple steps that organizations can follow to transform into an AI-powered enterprise: Successful GenAI-powered enterprise transformation strategies start at the top. An Enterprise AI Steering Committee, led by C-suite executives such as the CEO or CIO, is essential. This committee should also include other key stakeholders like the CFO, CMO, CHRO, and COO, who together lay down the strategic vision and oversee the momentum of GenAI initiatives. Leaders from the value network and ecosystem must be co-opted into the steering committee. Depending on the specific context or enterprise priority, similar multifunctional steering committees could be set up at unit levels. In a retail context, for example. that might mean an Omnichannel AI Steering Committee, a Customer Service AI Steering Committee, and a Supply Chain AI Steering Committee. Meanwhile, the broader Enterprise AI Steering Committee can ensure that the most impactful ideas, tools, and approaches flow freely from one unit to another. The primary role of these Steering Committees at any level is to align GenAI strategies with the overarching enterprise goals and unit level business objectives. The steering committees must remove impediments that tend to slow down progress and enable a "one team mindset". Most importantly, the Enterprise AI Steering Committee would be empowered to make decisions on responsible sharing of data and would review and approve proposals for new GenAI programs. A transformation advisor with a strong background in GenAI and industry-specific knowledge is invaluable. This advisor helps bridge the gap between technological capabilities and business needs, ensuring that GenAI solutions are not just technically sound but are aligned to deliver measurable business outcomes. They play a critical role in managing adoption, addressing skepticism among stakeholders, and integrating GenAI into the fabric of the enterprise. Prerequisites for the success of an enterprise GenAI strategy include a robust enterprise cloud strategy and a data consolidation roadmap. A

composable architecture will better align with the changing needs of business and C-level business imperatives. Before making significant investments in new GenAI capabilities, a comprehensive GenAI readiness assessment is essential. This assessment should review existing infrastructure, data availability, tooling, and skillsets to identify gaps that need bridging before full-scale GenAI project portfolios are commissioned. It is important to factor in the requirements of entities in the value network and the ecosystem to the extent desired and feasible. Based on this assessment, organizations should develop a phased plan of iterations that deliver measurable and progressively increasing business value. A holistic ecosystem approach ensures that GenAI solutions are scalable and can leverage data and insights across the enterprise and beyond, including partners and customers. This approach will contribute to robust and versatile GenAI applications that deliver value not just within isolated departments, but across entire value chains and value networks. In domains like healthcare, with high levels of regulatory scrutiny, one promising solution is the data hub. Rather than a one-time massive cloud migration, individual datasets can be safely and securely moved into a cloud data hub while other datasets remain in their approved on-premise legacy systems. As the data in the data hub scales, business users inevitably uncover new and unforeseen opportunities to apply GenAI to data in a way that opens new efficiencies and revenue streams. This squad consists of GenAI advocates and leaders from various business units who ensure that GenAI initiatives are relevant, executed well, and adopted in their respective units. They are accountable for the success of their unit-level GenAI projects and the achievement of associated business metrics. They act as liaisons between the GenAI steering committees and the operational teams, fostering a culture of collaboration and innovation. Leadership needs to actively foster a culture that embraces GenAI, focusing on continuous learning and ethical use. Wipro's own billion-dollar investment in AI, for this reason, includes a provision for scaling AI knowledge and increasing awareness on how to use AI responsibly across all roles. Such efforts should explain the basic functionality and benefits of GenAI, establish metrics for success, and assure that all employees understand their responsibility in this transformative journey. Unit-level AI Academies, meanwhile, can advance continuous learning and certification of employees aligned to their career aspirations and business needs. AI hackathons and AI idea jams will increase active participation from innovation employees and enable the formation of communities of practice. Riding the GenAI wave demands a fundamental transformation in how enterprises operate and innovate. Organizations that approach GenAI adoption through these six steps will enhance their operational efficiency while gaining a significant competitive advantage in the evolving business landscape. This structured approach ensures that GenAI is a foundational element of enterprise strategy, driving long-term growth and innovation. This doesn't mean slowing down the creativity of the many teams who have been applying GenAI in various niches across the business. It simply means providing talented innovators with guidance, tools, knowledge sharing forums, consolidated datasets, and governance frameworks that consistently allow GenAI proofs of concept to serve the overarching business strategy. This effort will rapidly supercharge and scale the most promising POCs, minimizing wasted effort and harnessing both GenAI and human creativity in sustainable programs that deliver

measurable value and desired impact. Sandhya Arun Chief Technology Officer, Wipro Ltd. With 30 years of professional experience, Sandhya has worked in various roles including strategy, consulting, delivery, operations, transition, and transformation. She is intentional about working with enterprises that create a positive impact on people, profit, and the planet.

---- Arcticle source ---- https://www.wipro.com/blogs/ravi-kumar-emani/ ----- Contact Wipro Please fill the required details to access the content Ravi Kumar Emani General Manager and Practice Head, 5G Edge Connectivity, Wipro Engineering Ravi has more than 25 years of experience helping global enterprises realize their connectivity goals. He is currently responsible for the Connectivity Practice Unit for NEPS and the Communications portfolio for Wipro Engineering. Ravi has authored numerous articles on 5G and is a Distinguished Member of the Technical Staff (DMTS) at Wipro.

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#### Transforming Telco Operations with Network Digital Twins

----- Arcticle source ----- https://www.wipro.com/blogs/ravi-kumar-emani/ unleashing-the-power-of-network-digital-twins/ ----- Contact Wipro Please fill the required details to access the content Unleashing the Power of Network Digital Twins Network digital twins (DT) are becoming more popular among telcos worldwide as a way to address various business challenges — from sales and marketing, network operations and customer experience, to IT operations, network planning, and more. This piece explores practical applications of network DTs and how they're empowering businesses to achieve their autonomous operation objectives. The Power Behind Network DTs A network digital twin is a large-scale model that mirrors the real physical network across its life cycle and is continuously updated from design, operational data, and sensor data (real network traffic data). It can use simulation, machine learning, and reasoning to help make decisions or check the decisions made by machines or network operators. It can also simulate what-if scenarios to apply the changes efficiently. DTs can improve the operational efficiency and network quality for telcos. Some key examples are: Click here to view the architecture overview Creating the reference digital twin for a 5G NR network involves examining and assessing the following components: DT Applications and Their Benefits Wipro has leveraged its technical expertise in these areas to develop several reference applications for network digital twins on NVIDIA Omniverse. Below are a few examples of these applications and their potential benefits. 5G NR Traffic Steering Application: In a multi-layered radio deployment of 5G NR with low-, mid- and high-band-based cells, it is important to balance the traffic across layers while maintaining a quality user experience. Traffic steering applications analyze various network parameters like cell

congestion, signal strength, user data requirements, service type, and user mobility. Based on this analysis, the rApp/xApp provides inputs to the radio resource management layer to admit the user equipment to specific cells and frequency bands or component carriers, while balancing the load by moving traffic across layers. Traffic steering rApps/xApps consider userspecific and service-specific factors, offering more intelligent and dynamic traffic management. Self-learning AI techniques are used to measure and predict traffic conditions. A probabilistic policy recommendation is applied to balance the traffic on carriers and deployed in a geographical location. Wipro developed a reference application leveraging the NVIDIA AI platform with AI model training and inferencing run on NVIDIA Tensor Core GPUs, and digital twin 3D modeling run on NVIDIA Omniverse. Key benefits: Wipro also built a reference network digital twin on the NVIDIA Omniverse platform, using a layered architecture and AI-based libraries for network automation, adhering to 3GPP, O-RAN, and Tele Management Forum (TMF) standards. About The Author Ravi Kumar Emani General Manager and Practice Head, 5G Edge Connectivity, Wipro Engineering Ravi has more than 25 years of experience helping global enterprises realize their connectivity goals. He is currently responsible for the Connectivity Practice Unit for NEPS and the Communications portfolio for Wipro Engineering. Ravi has authored numerous articles on 5G and is a Distinguished Member of the 

---- Arcticle source ---- https://www.wipro.com/blogs/bijal-vasant/ ---- Contact Wipro Please fill the required details to access the content Bijal Vasant Bijal is an Investment Manager at Wipro Ventures Works on identifying and evaluating investment opportunities in Data and Cybersecurity segments. Prior to that she spent 3 years in Private Equity focusing on the Consumer sector and in Investment Banking. Bijal is a Chartered Accountant (from the Institute of Chartered Accountants of India), has completed all three levels of the CFA (US) program and graduated with a bachelor's in commerce from Mumbai University.

#### Identity & Access Management: Navigating Today's Digital Perimeter

---- Arcticle source ---- https://www.wipro.com/blogs/bijal-vasant/identity-and-access-management-navigating-todays-digital-perimeter/ ---- Contact Wipro Please fill the required details to access the content Identity & Access Management: Navigating Today's Digital Perimeter In today's rapidly evolving digital landscape, identity has transformed into the foundational perimeter for organizational security. As companies expand and diversify their technology stacks, the number of software, applications, and

infrastructures instances in use across an organization is growing exponentially. Managing who has access to what across these workflows is becoming increasingly complex and is further compounded as modern business operations continue to scale and become more dynamic. With the widespread adoption of cloud applications, the shift towards remote work, and increase in mobile device usage, organizations are experiencing a significant surge in the number of identities (both human and non-human) that need to be managed. These factors, among the top contributors to identity proliferation, underscore the need for robust Identity & Access Management (IAM) systems. Unfortunately, the majority of security breaches are linked directly to issues within IAM—specifically mismanaged identities, access, or privileges. Despite the deployment of multiple systems to secure identities, alarming statistics reveal that 90% of organizations have suffered identity-related breaches in the past year, with 80% of these attacks involving compromised credentials. Challenges in Current Identity Security Practices & Gaps in Existing Solutions Scalability and Usability: Legacy IAM solutions aren't best suited to scale effectively with organizational growth and lack user-friendliness. These shortcomings present a fertile ground for newer, more agile solutions, although transitioning away from deeply embedded legacy systems remains a significant hurdle. Silos Between IT and Security Teams: Typically, business units or IT teams manage identity roles, deciding who gains access to what, while security teams are charged with protecting these identities. This separation of responsibilities often leads to a disconnect between managing access and securing it, which then creates gaps in an organization's security posture. Need for Dynamic Approaches: Traditional Identity Security solutions are built around static, group-based policy management using Role Based Access Control (RBAC). This becomes inadequate in today's fluid business environments where users belong to several groups and their roles change dynamically. Modern enterprises require more dynamic, context-rich approaches to access management that can adapt to changing conditions and user roles and do it automatically. Identity Security Extends Beyond Human Users: It's not just about keeping people safe - we also need to make sure that machines and devices are secure. Today a company's assets extend beyond traditional security perimeters with implementation of policies like Bring Your Own Device (BYOD). Additionally, with migration to the cloud, software, applications and infrastructure are all interconnected through APIs. It's essential to precisely control which services or workloads can perform specific tasks within this digital ecosystem, making workload identity security a critical aspect for an enterprise. Ideal State: Comprehensive and Dynamic Identity Security Looking ahead, the ideal state for IAM involves a comprehensive system capable of managing all aspects of the security lifecycle - discovery, assessment, monitoring, and automation of all related workflows. This system would integrate: In the next blog we will discuss what are some of the key areas of innovation for nextgeneration solutions in Identity & Access Management. As enterprises continue to navigate the complexities of digital transformation, a need will arise for solutions that not only address the evolving challenges but also anticipate future needs through intelligent, automated, and context-aware systems. About the Author Bijal Vasant Bijal is an Investment Manager at Wipro Ventures and works on identifying and evaluating investment opportunities in Data and Cybersecurity segments. Prior to that she spent 3

---- Arcticle source ---- https://www.wipro.com/blogs/jason-chern/ ---- Contact Wipro Please fill the required details to access the content Jason Chern Jason is on the investment team at Wipro Ventures The corporate investment arm of Wipro. He is focused on companies building the future of machine learning, software development, and enterprise infrastructure. Before joining Wipro Ventures, Jason held various roles shaping and evaluating enterprise software products as a product manager, investor, and consultant. He holds a bachelor's degree in economics and computer science from the University of California, Berkeley.

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#### Beyond the Benchmarks: Unlocking Consistent Performance and Value from Generative AI Applications

---- Arcticle source ---- https://www.wipro.com/blogs/jason-chern/beyondthe-benchmarks-unlocking-consistent-performance-and-value-fromgenerative-ai-applications/ ----- Contact Wipro Please fill the required details to access the content Beyond the Benchmarks: Unlocking Consistent Performance and Value from Generative AI Applications Nearly two years after ChatGPT's debut, the software market continues to see a surge of new Generative AI (GenAI) solutions emerging almost every day. In ongoing conversations with enterprise leaders and founders in the AI community, our team at Wipro Ventures has observed many enterprises eager to experiment and integrate with GenAI solutions, but few with significant adoption within customer-facing products and broader organizational operations. Despite massive investments of capital and technical talent throughout the AI stack, we know that most enterprises still view response accuracy, content safety, and regulatory compliance as critical hurdles that hold them back from scaled GenAI deployment in production settings. The Necessity of Evaluation Despite the initial excitement and high expectations for products like ChatGPT, many users have also experienced their potential to produce erroneous or hallucinated results. This reinforces the need for rigorous quality assurance of GenAI products that leverage Large Language Models (LLMs) before we can expect long-term enterprise adoption. Previous AI solutions have underscored the importance of predictable and consistent performance, particularly in use cases where inaccurate outcomes have

severe negative consequences. For example, autonomous vehicle (AV) companies have spent years improving their performance and several published studies even suggest that AVs significantly reduce traffic accidents. However public trust in AVs continues to waver due to a few recent high-profile accidents. Similarly, for enterprise use cases like data analysis, customer support, and code generation, user trust in GenAI can quickly erode if outputs are not consistently accurate and safe. Enterprise surveys reveal the top concerns cited about GenAI adoption are often related to hallucinated false information or offensive and off-brand language. All software today goes through extensive pre-release testing and postlaunch monitoring to ensure it behaves as expected, remains secure, and handles exceptions gracefully. We believe existing MLOps platforms and new LLMOps solutions will find ways to apply the same rigor to GenAI-integrated applications to achieve consistent and predictable performance. Understanding the Complexities Prior to the popularization of the GPT models, many companies were already using AI models for tasks like fraud detection, product recommendations, spam filtering, sentence autocompletion, and object recognition. Even if these models sometimes produced false positive or negative results, the quality of output for this previous generation of AI use cases was straightforward for users to define and evaluate. Assessing GenAI models like LLMs is more challenging. GenAI use cases often focus on content creation, where output quality is subjective. This subjectivity complicates the reliability and scalability of both automated and human-led performance evaluations, the latter of which is further challenged by individual biases. While most researchers and builders in the LLM community rely on standardized benchmarks to measure model performance, these benchmarks do not fully capture the nuances of LLM usage within applications. A high-quality LLM response often requires not just accuracy of information but also tone, brevity, and relevance that is personalized to the user. Evaluation Methods Current evaluation methods and metrics assess three primary areas: Model Benchmarking: Using predefined metrics to measure a foundational AI model's performance. There are several benchmarking frameworks that are openly available and standardized across the AI research community, the most popular of which evaluate models' general reasoning, knowledge, and understanding of language (e.g. MMLU, HellaSwag). These benchmarks are useful for comparing baseline performance when selecting or tuning a model. System Implementation: Evaluates the impact of various components used in a GenAI application besides the models, such as prompts, data pipelines, embedding and indexing, model context, or search and retrieval algorithms. As developers combine and configure these components to build increasingly complex AI systems, the design and implementation of each component will determine how well user inputs generate the desired outputs. Output Quality: Assessing GenAI outputs using human-based judgment to determine the quality of responses. Besides answer correctness, evaluation criteria can also consider factors like relevance to the original query, coherence in response, faithfulness to the retrieved context, etc. These assessments can be done manually by human evaluators or LLMs that have been prompted or tuned to apply human-like preferences. Using LLMs to automate output evaluation is growing in popularity given the speed of implementation and flexibility in language understanding, but scalability of cost and performance will become a challenge. What's Next? As AI

applications gain adoption and evolve from copilots toward autonomous agents, we expect significant innovation in evaluation solutions and metrics. Agentic applications will greatly expand the complexity and expected performance of AI models, requiring even higher standards for reliable and safe performance. GenAI applications require specialized technical talent and computing resources to operationalize, so they must provide proportionally transformative performance to justify the high cost of investment. Over the past several years, the team at Wipro Ventures has been committed to investing in strategic and innovative AI applications. These portfolio companies, such as Avaamo (conversational AI), Lilt (enterprise translations), Kibsi (computer vision), Kognitos (process automation), Tangibly (trade secret management), and Ema (agentic AI employees) - each represent significant opportunities for enterprises to improve operational productivity and create transformative customer experiences. We believe GenAI capabilities will continue to guickly evolve and we are still in the earliest stages of realizing the technology's benefits. Looking forward, we see several critical areas of focus for the future success of GenAI solutions: Platforms for creating use case-specific evaluation frameworks: Organizations adopting AI applications will use them for different tasks, in different industries, and to represent unique brands, all while complying with different geographic regulations and preferences. Many enterprises will lack the technical skillsets needed to build the evaluation datasets and LLM evaluators that best represent their individual use cases. There has already been an explosion of open-source solutions in this segment, and we expect future enterprise offerings to integrate and consolidate these capabilities. Optimized evaluation pipelines: LLM responses require numerous accuracy and safety checks before delivery, increasing development, operational, and inference costs while affecting application responsiveness. As LLM-driven applications increase in complexity, we anticipate new purpose-built tooling for more efficient deployment of LLM evaluation infrastructure. Tighter feedback loops between user interactions and model performance: Today, many AI applications have their user experiences graded with direct user feedback or rates of user conversion and retention. These approaches, while reflective of user preferences, are slow and have binary outcomes. We predict the emergence of more sophisticated LLMOps tools to programmatically assess LLM outputs against human performance, using top-rated responses to refine models and their evaluation datasets. If you are a practitioner focusing on building new tooling and infrastructure for evaluating GenAI applications, or interested in discussing any of these concepts, please don't hesitate to get in touch with me at jason.chern@wipro.com. About the Author Jason Chern Jason is on the investment team at Wipro Ventures, the corporate investment arm of Wipro. He is focused on companies building the future of machine learning, software development, and enterprise infrastructure. Before joining Wipro Ventures, Jason held various roles shaping and evaluating enterprise software products as a product manager, investor, and consultant. He holds a bachelor's degree in economics and computer science from the University of California, Berkeley.

#### VMware Workload Migration & Modernization with IBM Cloud

----- Arcticle source ----- https://www.wipro.com/blogs/suresh-kakkar/vmwareworkload-migration-and-modernization-with-ibm-cloud-powered-by-wiprofullstride-cloud/ ---- Contact Wipro Please fill the required details to access the content VMware Workload Migration & Modernization with IBM Cloud powered by Wipro FullStride Cloud powered by Wipro FullStride Cloud VMWare clients can more effectively manage technology investments while increasing security and flexibility with IBM Cloud for VMware powered by Wipro FullStride Cloud. Enterprises around the world are constantly being reinvented to remain agile, efficient and relevant. Clients are at the crossroads with Broadcom's acquisition of VMware as the impacts are multi folds i.e., Cost Increase, Changes in Licensing Models, Packaging of VMware Products, Relationship Changes, Product Changes & Overall Impacts on Development & Services. Enterprises needs to move at their own pace while determining if they will maintain, migrate or modernize their applications. The core value proposition of "IBM Cloud for VMware powered by Wipro FullStride Cloud" is being flexible and future-proof, which offers clients to migrate today & modernize tomorrow. The Business Challenge Migrating or modernizing, it is critical to demonstrate the positive business impact of technology investment decisions. As enterprises venture into cloud migration, they face numerous challenges. Key obstacles include indecision, uncertainty, and the complexity of managing changes to critical applications without disrupting business operations. Day 0 migration journey begins with prioritizing business impacts by evaluating several criteria to make the right strategic decision. Day 1 journey focuses on the Near-Term Migration with minimal disruption & rapid migration or Long-Term Modernization by enabling VM-based applications modernization, including integrating AI capabilities and Day 2 ensures operations assurance with management, optimization & governance.. . Enterprises must address today's cost issues while effectively positioning for future tech needs all while keeping their business running The Business Opportunity & Value IBM Cloud for VMware Solutions powered by Wipro FullStride Cloud Studio aim to address these challenges, offering a comprehensive tripartite solution for delivering jointly engineered, enterprise-ready and end-to-end offering for migrating VMware architecture. Built on a 20+ year commitment to assisting customers in implementing a secure, AI-ready, hybrid cloud strategy with flexible VMware licensing options. IBM Cloud for VMware Solutions powered by Wipro FullStride Cloud Studio provide a managed service for VMware workloads in the cloud. This licensing solution is designed to deliver a seamless transition to new platforms with integrated lifecycle management and pre-built

migration landing zones inside a purpose-built operational model. Fig: IBM Cloud for VMware Solution Platforms powered by Cloud Studio IBM Cloud for VMware powered by Wipro FullStride Cloud Studio offers the potential for many benefits for those who adopt it helping their enterprises to enjoy lower costs of ownership, increased security, enhanced application flexibility, optimized workload management, granular licensing solutions, and less risky migrations. Aiming to reduce business disruptions and create a more agile IT infrastructure. Testimonials from early adopters underscore the transformative impact of Wipro FullStride Cloud, showcasing Wipro's commitment to client success. This unique offering is the key to unlocking the full potential of our clients' hybrid cloud strategy. It provides a comprehensive and integrated platform delivering: Your Future, Enabled. Equipped with the powerful capabilities of IBM Cloud for VMware powered by Wipro FullStride Cloud, enterprises have the ability to transform their operations, making them more efficient, secure, and prepared for future challenges. Learn more about Wipro Fullstride Cloud here Learn more about IBM Cloud for VMware solutions here. About the Author Suresh Kakkar General Manager, Wipro Limited With over 25 years of experience in technology and thought leadership. Recently, as GM of the VMware Business Unit, he drove business growth and crafted solutions for global clients, focusing on complex migration and multi-cloud solutions. Suresh has been granted patents in both India and the US. Nitin Das Director, Wipro Limited A technologist with 20 years of experience at Wipro Limited. Engaged as Director and Head - Solutions, Practice & global Go-To-Market for VMware Business Unit within FullStride Cloud Services (FSC). Has carried varied roles in the solution, presales and sales in IT infrastructure business.

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