



The Work Ahead: Asia Drives Digital's Future

The Work Ahead is a research series providing insight and guidance on how organizations are evolving to the next stage of the digital economy. In this report, we explore how C-level executives in Asia Pacific and the Middle East are incorporating digital technologies and techniques to ensure a successful future for their future of work.

THE WORK AHEAD

Executive Summary

According to our research, businesses in APAC and the Middle East have reached a point of clarity in terms of the real purpose of digital tools and made great strides in understanding what the human-machine balance of work should be.

When we released our “[Work Ahead](#)” in Asia Pacific report in 2016, “the digital era” was just taking hold.¹ Companies in the region were ahead of Europe and North America in their advanced technology investments, spending an average of 15% of their total annual revenue, compared with the global average of 11%.

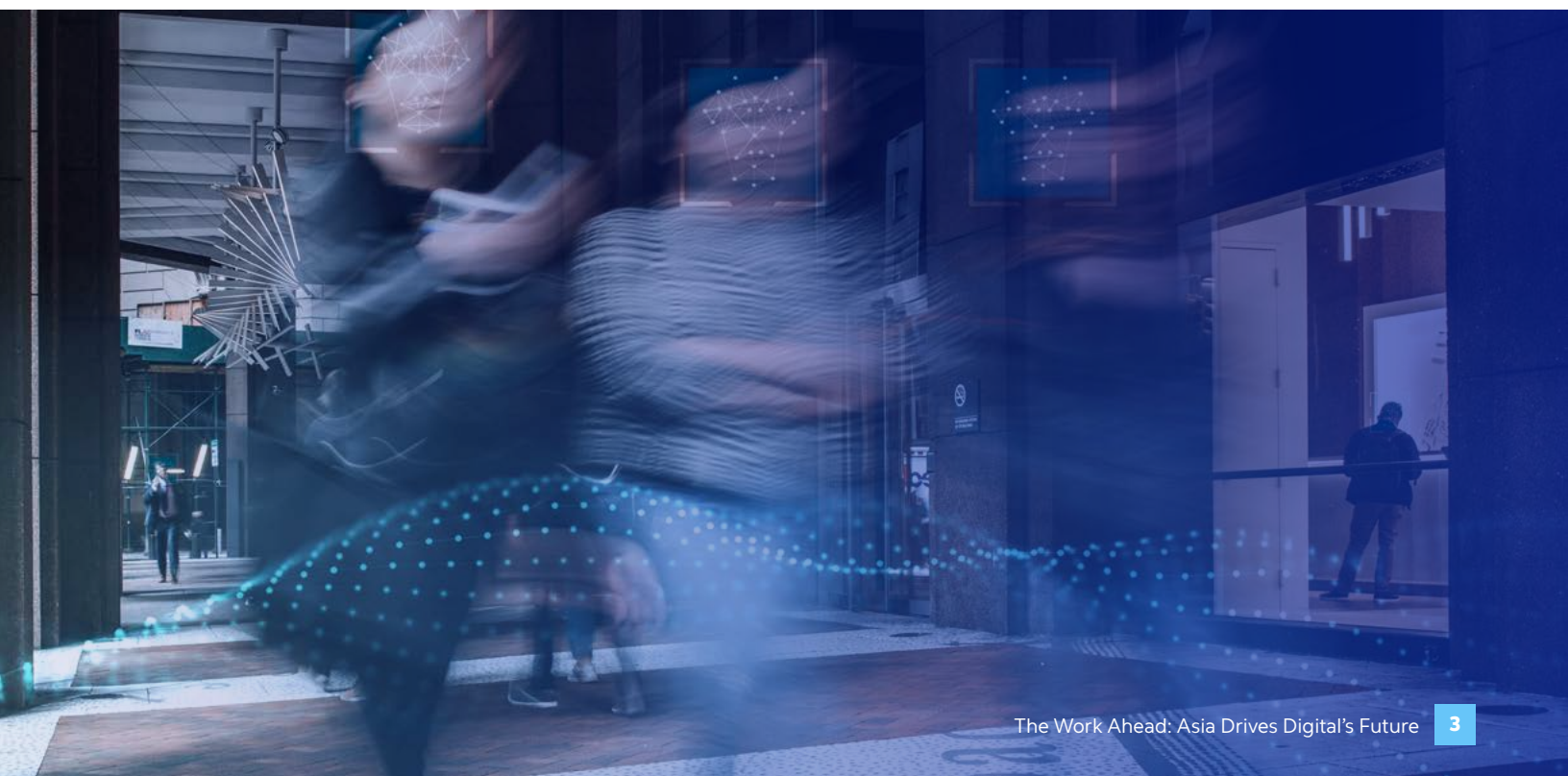
Four years later, when COVID-19 turned the world upside down, these investments paid off: Most Asian businesses were quick to respond, compressing many long-term digital projects into the space of weeks and months, putting them in a better position to emerge stronger from the pandemic.

The digital economy’s pendulum had already begun its swing from West to East – and the pandemic catalyzed this shift. New ways of working (remotely), new ways of doing business (all online) and new ways of creating value (safe customers and employees) made companies realize what digital had to offer. Google’s [recent announcement](#) to invest \$10 billion in India to develop the country’s digital economy is further proof that the COVID-19 crisis has failed to dim Asia’s bright outlook.² In the post-COVID-19 era, “digital” means more than just applying technology to business

processes; it means reinventing business operations to thrive against all odds.

To understand the changing nature of work, commerce and success in this new world, we surveyed 4,000 global executives globally and across industries, 1,200 of whom were in Asia Pacific and the Middle East (see methodology, page 22). What we found is businesses in these regions have reached a point of clarity in terms of the real purpose of digital tools – what they’re best used for – and have made great strides in understanding what the human-machine balance of work should be.

We call this the second act of digital, and Asia seems to be leading the charge. As this next phase unfolds, the world can look to the region to showcase how the future of work will unfold.



Rather than relying solely on AI and automation for the work ahead, these businesses are blending and extending the strengths of humans (innovation, decision-making, judgment, leadership, etc.) with the capabilities of machines (accuracy, endurance, computation, speed, etc.) to create a partnership to achieve business goals. Respondents appear certain that the transition to intelligent machines will require an acute focus on the relationship between humans and machines: how the two will collaborate, and how the current workforce and the business itself will adapt to AI.

Key insights from our report include:

- 1 **Asia's long-term growth remains intact.** While uncertainty still runs high in Europe and the U.S. as the world contends with controlling the virus, Asia's economy has so far [rebounded more quickly and robustly](#) than the Western economies.³ Rising factory output and retail sales in China [are further signs](#) of recovery.⁴ As a result, only 33% of Asia Pacific companies in our study believe the virus will have a large to very large impact on their business performance in the long-term. The percentage climbs to 39% for respondents in the Middle East.
- 2 **Becoming digital to the core is key to a faster and stronger recovery.** Forty-eight percent of respondents said the pandemic would further accelerate digital ways of working. On average, regional respondents aim to generate 14.7% of their revenues through digital channels by the end of 2023, up from 9% today, a 63% growth rate.
- 3 **Asia Pacific and Middle East companies are bullish on AI and analytics.** Of any technology, AI will have the most significant impact on work (according to 93% of respondents vs. 89% in North America and Europe), followed by business analytics. By merging AI with analytics, businesses will improve data management, decision-making and customer engagement.
- 4 **Human skills are required to take maximum advantage of machines.** Decision making, strategic thinking and learning will become the top three most important skills in 2023. These skills are best performed by humans – not in isolation, though, but supported by the insights generated by AI and data analytics and by the efficiencies of intelligent automation. Doing so will free up human workers to focus on these higher level activities while also learning what it takes to become better humans and collaborate effectively with machines.
- 5 **As machines take on more data-driven tasks, work will become faster and smarter.** Digital tools and techniques will result in jobs becoming more specialized (51%), work getting done more quickly (47%) and the ability to make better decisions (45%).
- 6 **Augmented processes will drive significant business benefits.** While businesses have traditionally focused mainly on achieving operational efficiencies from their technology implementations, they'll shift more to strategic outcomes in the next two years, like decision-making and improving the customer/employee experience.

COVID-19: the ‘moment of digital truth’

Digital ways of working and behaving, forged and refined in the heat of battle against COVID-19, will not be “put back in the box.”



The saying “everyone has a plan until they get punched in the face” applies perfectly to today’s COVID-19 scenario. Although businesses were adopting digital technologies long before the pandemic hit and may have thought they had a “digital plan,” they had to accelerate their strategies overnight, transitioning in days or weeks to work-from-home and online modes of doing business.

The pandemic whetted companies’ appetite and capacity for change as advanced technology adoption moved quickly from a strategic priority to an operational imperative. For National Australia Bank’s chief executive [Ross McEwan](#), “Permanent change, in my mind, has just been made in 10 weeks. It would have taken us another five years.”⁵

As with other regions, the pandemic threw many businesses into disarray. However, our research reveals that a somewhat smaller percentage of businesses in Asia Pacific and Middle East (42%) were forced to make significant changes to mitigate the impact of the pandemic, compared with 45% in North American and 46% in Europe. From China’s speedy hospital construction, to South Korea’s aggressive testing, to Singapore’s contact tracing and open public communication, to UAE’s long-term work to become a digital economy, proactive approaches and early government measures put businesses in these regions in a better position for faster recovery than others. The International Monetary Fund, in fact, [projects](#) that China will be the only major economy to grow in 2020, with an estimated 1.9% expansion, while India [will quickly bounce back](#) with 8.8% economic expansion in 2021.^{6,7}

Digital ways of working and behaving (business conferencing tools, e-commerce, remote learning, among others), forged and refined in the heat of battle against COVID-19, will not be “put back in the box.” In fact, 48% of companies surveyed said the pandemic would further accelerate digital ways of working.

Governments in the region will play a proactive role in shaping the post-COVID economy with digital investments. The UAE government, for example, [has announced](#) a phased plan that includes investments in 5G, smart cities and blockchain.⁸

Similar to their counterparts elsewhere, APAC and Middle East respondents are counting on digital to drive future revenue growth. The difference for Asia is that it has come through crises before (be it the 2008 global financial crisis or the 2003 SARS outbreak) and emerged stronger.

Among our respondents, only 33% of Asia Pacific companies (compared with 39% in Middle East) believe the virus will have a large to very large impact on their business in the long-term.

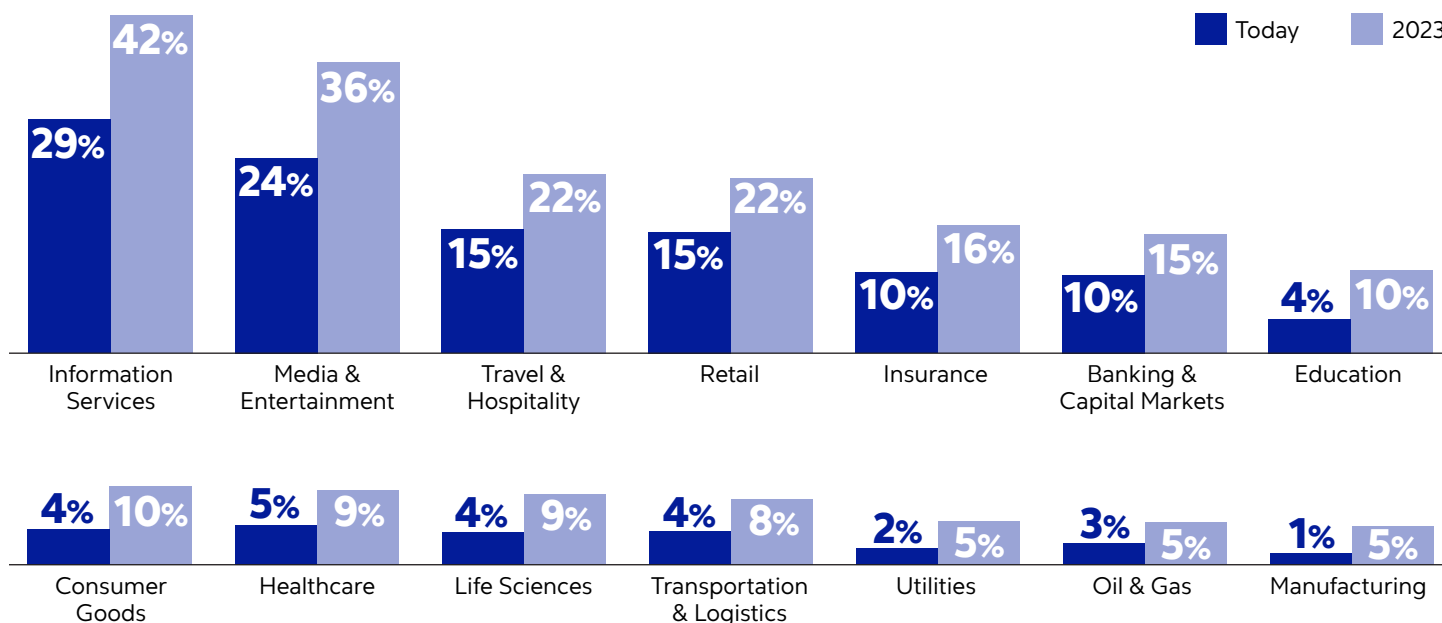
On average, Asia and Middle East respondents said they aim to generate 14.7% of their revenue through various digital channels by the end of 2023, up from 9% today, registering a growth of 63% (see Figure 1, next page). Among all industries, information services companies are most bullish on digitally derived revenues, with expectations of driving 42% of revenues from digital channels by 2023, up from 29% today. This is followed by media & entertainment (36%), travel & hospitality (22%) and retail (22%). Manufacturers, meanwhile, have the highest growth expectations, at 200%-plus growth in digital revenue between now and 2023, followed by utilities (165%), education (143%) and life sciences (115%).

48%
of respondents agree

The pandemic will further accelerate the adoption of new, digital working practices.

Banking on digital for fast recovery and future growth

Respondents were asked to specify the percentage of revenue derived through digital channels, now and in 2023.
(Percent of revenue)



Response base: 1,200 senior executives

Source: Cognizant Center for the Future of Work

Figure 1

Some companies are seeing particularly fast upticks in converting to digital. Thanks to its pre-pandemic work to modernize its IT infrastructure, DBS Bank in Singapore was able to [roll out a new platform within 14 days](#) during the lockdown that allows customers to submit documents digitally.⁹ As a result, DBS saw a 30% year-on-year increase in the adoption of its digital banking services in the first half of 2020. It also witnessed 100 million more digital banking transactions in

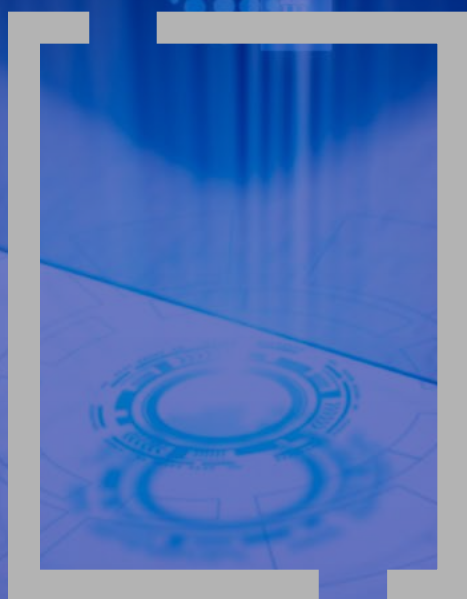
2020 and now serves nearly [one-third of its 3.4 million digital users](#) entirely online.¹⁰

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The rise of intelligent work

The rise of AI is intertwined with the growing adoption of automation and analytics as businesses work to imbue these technologies with intelligence.



For companies to meet their ambitious revenue targets from digital channels, they'll have to construct the mechanisms for doing so.

It's not surprising, then, that when we asked regional executives about the technologies they believe will have the maximum impact on work in 2023, they pointed to AI, hyperconnectivity, process automation and business analytics (see Figure 2).

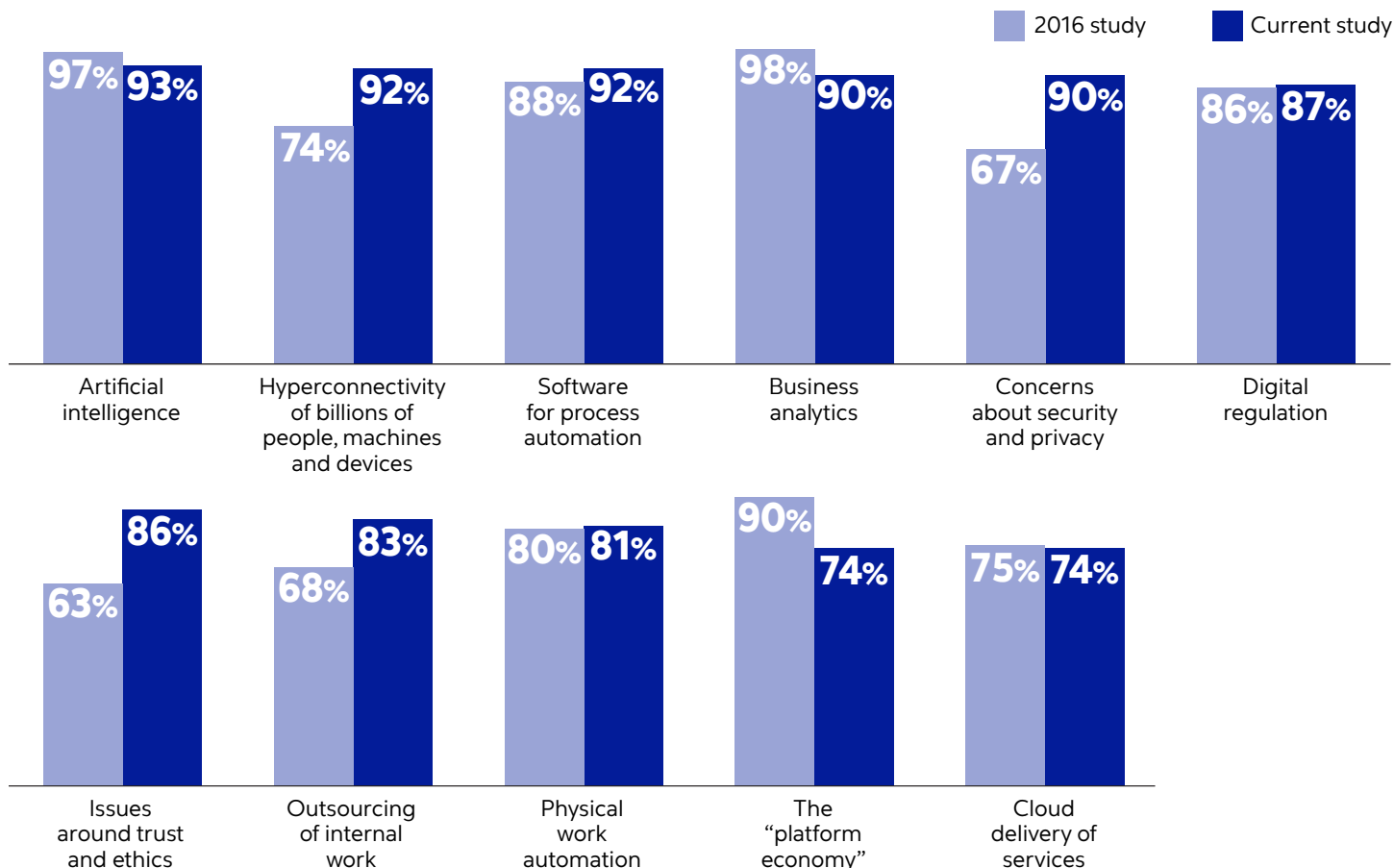
Used in combination, these technologies can help businesses work more efficiently by providing customers with new ways to interact and transact while also connecting these front-ends with streamlined back-end processes and producing intelligence for decision making and personalization much more quickly than human workers ever could. As one respondent, the CMO of an insurance company in Australia, said, "We sought a combination of AI with big data, connected

devices and advanced analytics to add value to this process change. As a result, we've realized greater accuracy with speed in claims processing, billing inquiries, customer interactions/support, premium calculations and risk profiling of customers."

Asia Pacific and Middle East companies are at least as bullish on AI and analytics as their global counterparts are, if not slightly more so. In these regions, 93% of respondents named AI as having the highest impact on the future of work vs. 89% in North America and Europe. Ninety percent named analytics as a key driver vs. 88% in North America and Europe. With access to the world's largest millennial customer base ([800 million in APAC](#) compared with 66 million in the U.S. and 60

AI will make automation and analytics truly intelligent

Respondents were asked to rate the impact of several forces on work in the next three years.
(Percent of respondents citing high and moderate impact)



Response base: 1,200 senior executives (current study); 400 senior executives (2016 study)

Source: Cognizant Center for the Future of Work

Figure 2

million in the EU), aggressive government support, a focus on building talent, the absence of a legacy burden and a high level of internet and mobile penetration, these businesses' AI capabilities rival the rest of the world.¹¹

The region accounts for [roughly 45% of global mobile traffic](#), generating the huge volumes of data necessary to feed AI systems.¹² That's how China's [900 million internet users](#) – the largest user base of any country in the world and more than the entire population of Europe – are fueling the Chinese government's dream of becoming a global AI leader by 2030.¹³ In fact, Asia Pacific is set to overtake the rest of the world in AI spending over the next three years – [reaching \\$15 billion by 2022](#), according to IDC.¹⁴ Companies large and small are busy chasing the AI dream in the region.

Our findings also point to significant interest in alternative sourcing models for pursuing technology initiatives (from 68% in 2016 to 83% in 2020) as talent scarcity continues to be a key leadership challenge. In our recent research “[From Eyes to Ears: Getting Your Brand Heard in the New Age of Voice](#),” 80% of Asia Pacific and Middle East companies face a talent shortage in building voice strategies and are seeking out independent partners with expertise.¹⁵ Doing so will help brands tap new innovations and capabilities to refine and scale up their advanced technology initiatives.

AI-infused automation and analytics

The rise of AI is intertwined with the growing adoption of automation and analytics as businesses work to imbue these technologies with intelligence. The CIO of an Indian utility said

the business was utilizing AI-enabled analytics to predict the need for repairs and ensure machinery runs at peak efficiency. As a result, the business is moving away from the “repair-or-replace” maintenance model to a “predict-and-fix” model.

Process automation is no longer optional. A senior executive at a manufacturer in Australia said the company had achieved close to 10% to 12% automation in its warehouses. As software bots become more intelligent, he expects that to rise to 30%. As a result, the company can now make faster scheduling decisions and has enhanced monthly production for two plants by 18%. For countries with aging populations (South Korea and Japan, for instance), robotics and automation offer a way to retain economic activity even as the size of the workforce declines.

While hyperconnectivity will be another key technology driver, according to respondents, it's accompanied by growing concerns regarding privacy and security (from 67% of respondents in 2016 to 90% today) and ethics (from 63% in 2016 to 86% today). While people now place more trust in digital tools to stay connected and feel safe, they are equally concerned about their lives moving online.

Analysts already warn that Asia has become [the world's surveillance hotspot](#) because of measures taken to mitigate the spread of COVID and is at risk of serious privacy breaches.¹⁶ According to one study, [66% of Indian organizations](#) suffered at least one data breach after shifting to a remote working model.¹⁷ Indeed, hyperconnectivity will further heighten consumers' and employees' expectations, pushing businesses to optimize online experiences while ensuring they keep their data safe.

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The new rules of work: machine-driven, human-centric

Increasingly, the human role will become more focused on what gets done with data-driven insights, which requires a renewed focus on decision making, strategic thinking and learning.



Respondents believe intelligent machines will take on a greater portion of the labor involved with executing a variety of data-oriented tasks between now and 2023, from about 15% today to 24% in three years (see Figure 3).

Such work ranges from managing data to performing physical tasks to analyzing areas for improvement. When intelligent machines take on the work of collecting, managing and analyzing data, the self-learning algorithms that drive them can learn much faster and generate insights, helping businesses lower costs, improve productivity, and offer more targeted products and services to consumers.

At the same time, respondents are starting to develop a more realistic view of humans' role in the age of AI. As Figure 4 (next page) shows, the top valued workforce skills are increasingly tilted toward very human capabilities that validate the need for human-machine collaboration: decision-making, strategic thinking and learning. Both decision making and strategic thinking jumped up in the rankings (decision making from second to first place, and strategic thinking from fifth to second). These skills are best performed when workers are supported by the insights generated by AI and data analytics, and freed by intelligent automation from performing rote and repetitive work. Increasingly, the human role will become more

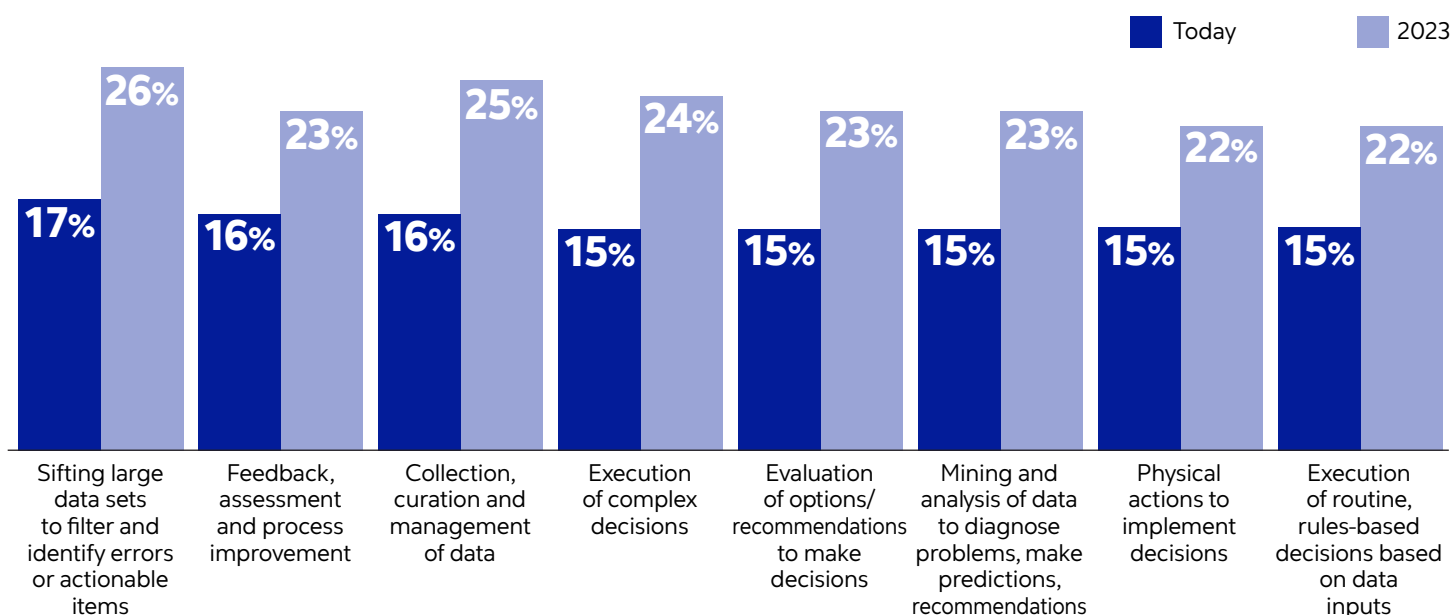
focused on what gets done with data-driven insights, which requires a renewed focus on decision making and strategic thinking.

A senior executive from an insurance company in Australia said that while automation will impact roles such as sales agents, underwriters, claims and policy processors and actuaries, it would also help insurers offer personalized and human experiences at scale. "Previously, we would need executives and front-line workers to manage the assistance work of an underwriter, but currently, the machines are doing the risk assessment to process the claims or the calculation of premiums," he said. "Executives get to spend more time with clients. Automation has made their jobs easier."

The human element of work roles was further echoed by the chief strategy officer of a Singapore retailer: "AI wouldn't understand why a refund is necessary in certain exceptional cases, where humans know that we want to retain a customer."

Machines increasingly take on data-oriented tasks

Respondents were asked to what extent the following activities are executed by machines vs. employees, now and in three years. (Percent of work done by machines)



Response base: 1,200 senior executives

Source: Cognizant Center for the Future of Work

Figure 3

What makes us human will make us employable in the future

Respondents were asked whether each skill was more or less important today than previously and whether they'd become more or less important in the next three years. (Percent of respondents saying 'more important')

2016	IMPORTANCE	By 2023
Innovation skills (40%)	1	(59%) Decision-making skills
Decision-making skills (39%)	2	(54%) Strategic thinking skills
Leadership skills (34%)	3	(53%) Learning skills
Analytical skills (33%)	4	(52%) Communication skills
Strategic thinking skills (31%)	5	(52%) Leadership skills
Communication skills (31%)	6	(50%) Customer care skills
Customer care skills (28%)	7	(48%) Innovation skills
Interpersonal skills (26%)	8	(47%) Analytical skills
Selling skills (25%)	9	(46%) Selling skills
Fabrication skills (21%)	10	(45%) Interpersonal skills

Response base: 1,200 senior executives (current study); 400 senior executives (2016 study)

Source: Cognizant Center for the Future of Work

Figure 4

Machines lack the emotional quotient and hence are less effective in a real-time customer service instance.” Japan is an excellent example of human coexistence with robots in the home and workplace. For the Japanese, robots are seen as a companion and not as a destructive force.

Interestingly, learning as a skill will become extremely important in the future (shooting up to third in the rankings from below tenth place). The rise of automation and AI is raising questions about the employable skills and behaviors necessary for people to participate in the future of work. Preparing the current and future workforce with relevant skills requires a reboot of traditional, decades-old training and learning models and approaches. To establish new learning models, businesses need to engage in more flexible partnerships, accelerate their response time, provide more proactive modes of delivery and offer new combined-skill programs. (For more on this topic,

see our report “[Relearning How We Learn, from the Campus to the Workplace](#).”¹⁸⁾

The emphasis on innovation also reveals the need for Asia Pacific and Middle East companies to change how they work as a result of the pandemic with the support of digital technologies. In the wake of the pandemic, for instance, Manulife Hong Kong [launched a virtual platform](#) that enables insurance agents to help customers with even the most complex insurance policies through secure video calls, screen sharing and e-signature technology tools.¹⁹ Meanwhile, Tsingtao, China's second largest brewer, [recruited more than 40,000 people in China](#) to become “social distributors” to promote products on its social networks and collect a commission based on sales. Tsingtao's WeChat store sales subsequently surged by a factor of three.²⁰

As human-machine collaboration takes hold, 46% of regional respondents expect work itself to get done more quickly, especially when it comes to making decisions in near real-time and providing personalized services/interactions (see Figure 5).

Once again, we see respondents' expectation that digital tools and techniques will enhance decision-making, with "tools to make better decisions" jumping from tenth place in 2016 to fourth today.

A view of the future of work

Respondents were asked how much they agree with each of the following statements regarding how work will change in the next three years. (Percent of respondents who strongly agree)

2016	IMPORTANCE	Current Study
Work will require greater technical expertise (42%)	1	Jobs will become more specialized (51%)
Work will require less travel (39%)	2	We will work faster (47%)
We will work faster (39%)	3	Work will require greater technical expertise (44%)
Jobs will become more specialized (39%)	4	We will have the tools to make better decisions at work (45%)
As tasks are automated, work will become more strategic (38%)	5	We will collaborate more with other workers (43%)
With access to more data, work will become more analytical (32%)	6	As tasks are automated, work will become more strategic (43%)
We will need fewer people to do work (29%)	7	Jobs and the required skills will change significantly (40%)
We will collaborate more with other workers (29%)	8	Many elements of work will be automated (40%)
Many elements of work will be automated (28%)	9	We will work more hours (39%)
We will have the tools to make better decisions at work (27%)	10	With access to more data, work will become more analytical (38%)

Response base: 1,200 senior executives (current study); 400 senior executives (2016 study)

Source: Cognizant Center for the Future of Work

Figure 5

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Quick Take

Five Ts of human-machine work

Organizations must align five elements (5Ts) – tasks, teams, talent, technology and trust – to successfully transition into the new world of work. The key to successful implementation is ensuring all five elements are integrated and aligned to create ultimate value. At the heart of the 5Ts will be business processes that need restructuring and reengineering for human-machine work:

I Tasks: Deconstruct jobs into tasks for optimum human-machine collaboration.

Companies will have to deconstruct jobs and identify which tasks are best performed by humans vs. machines. As a result of this shared involvement, AI systems can learn to better proceed with new and unknown scenarios, while humans can continue to adapt and focus on higher-value tasks.

I Talent: Skills that make you human will make you employable. Success with AI adoption will be based on how well companies blend and extend the strengths of humans (innovation, cognition, judgment, empathy, versatility, etc.) with the capabilities of machines (accuracy, endurance, computation, speed, etc.) to create a joint team for common business goals.

I Teams: Small, flexible and hybrid. In our survey, 47% of respondents agreed that the COVID outbreak led to more flexible team structures, removing organizational silos with less functional departments. A move from larger hierarchical team structures to smaller teams for greater flexibility and agility will be seen.

I Technology: IT matters more than ever. Whether your organization is recreating a business process from scratch or injecting AI into front-, middle- or back-office processes, success will depend on how well the IT infrastructure is integrated with AI systems. IT infrastructure needs to become agile, responsive, flexible, secure, scalable and simple to manage the transition.

I Trust: The new battleground for success. To grow trust with employees, leaders should proceed sensitively and gradually when introducing AI and automation and focus on the human-machine collaboration issue. As the CIO of a telecom organization in Malaysia said, “Technological changes are likely to bring employees closer to the company. The positive impact on employees would indirectly help our customers.”

(To learn more, see our report “[Humans + Machines: Mastering the Future of Work Economy in Asia Pacific](#).”²¹)

Augmenting workforce performance with augmented processes

Technology tools that do the heavy lifting on generating, consuming and acting on huge volumes of process data are the most widely used, with over 68% of respondents having implemented data analytics, AI or IoT.

In every traditional, well-established company, business models and supporting processes were formed long before digital technologies appeared on the scene. While such structures all made sense at the time, businesses and customers are now looking back and wondering, “Why did we do things that way?” Customer pain points like endless phone wait times for customer care or cumbersome insurance claim filing processes are no longer acceptable.

We asked respondents to name the business process that have been augmented (or improved) by applying technology and then say which technology tools were used. Technology tools that do the heavy lifting on generating, consuming and acting on huge volumes of process data are the most widely used, with over 68% of respondents having implemented data analytics, AI or Internet of Things (IoT) as full implementations or pilots (see Figure 6).

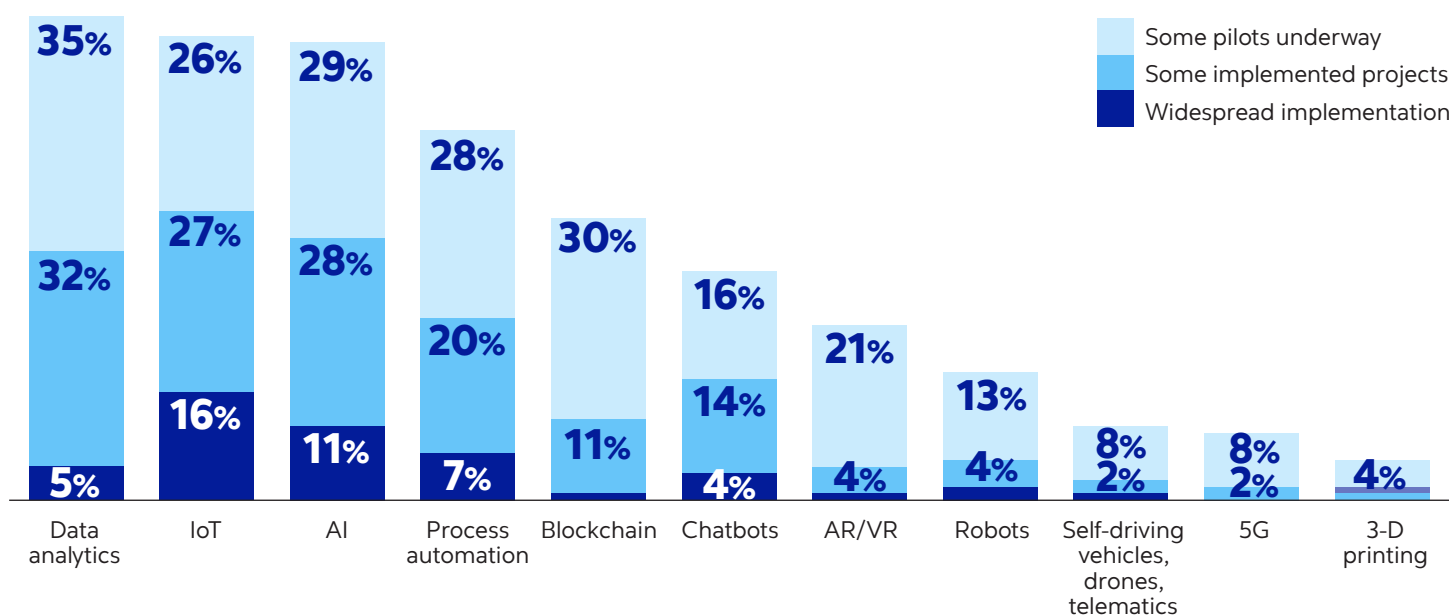
The majority of companies in the region (72%) are banking on data analytics to harness value from data. A senior executive from a Chinese manufacturer commented that “data analytics is deeply ingrained into our manufacturing process optimization and quality control measures. With real-time insights and decision-making, we could filter out production inefficiencies and remove human intervention on monotonous tasks in the assembly line, delivering new performance thresholds.”

Asia Pacific and Middle East respondents are on par with or slightly ahead of their peers in other regions when it comes to implementing IoT pilots and projects (69% of respondents in the region vs. 65% in North America and 68% in Europe). With sensors and instrumentation, it’s now possible to collect and analyze all manner of information, leading to a continuous awareness of what is occurring within a company’s operations and removing the need for guesswork/prediction.

The lockdown caused a large utility company in India to handle its plant’s scanning remotely with the help of sensors so that engineers no longer needed to inspect sites physically, according to a senior vice president at the company. “We are learning to manage grids at a remarkably high level with speed,” the SVP said. “I feel the crisis has provided fast enough insights to operators on keeping the grid stable, which will become the new norm post-COVID-19.”

Analytics, AI and IoT are key to improving processes

Respondents were asked about the progress made in using each technology to augment business processes. (Percent of respondents naming each implementation phase)



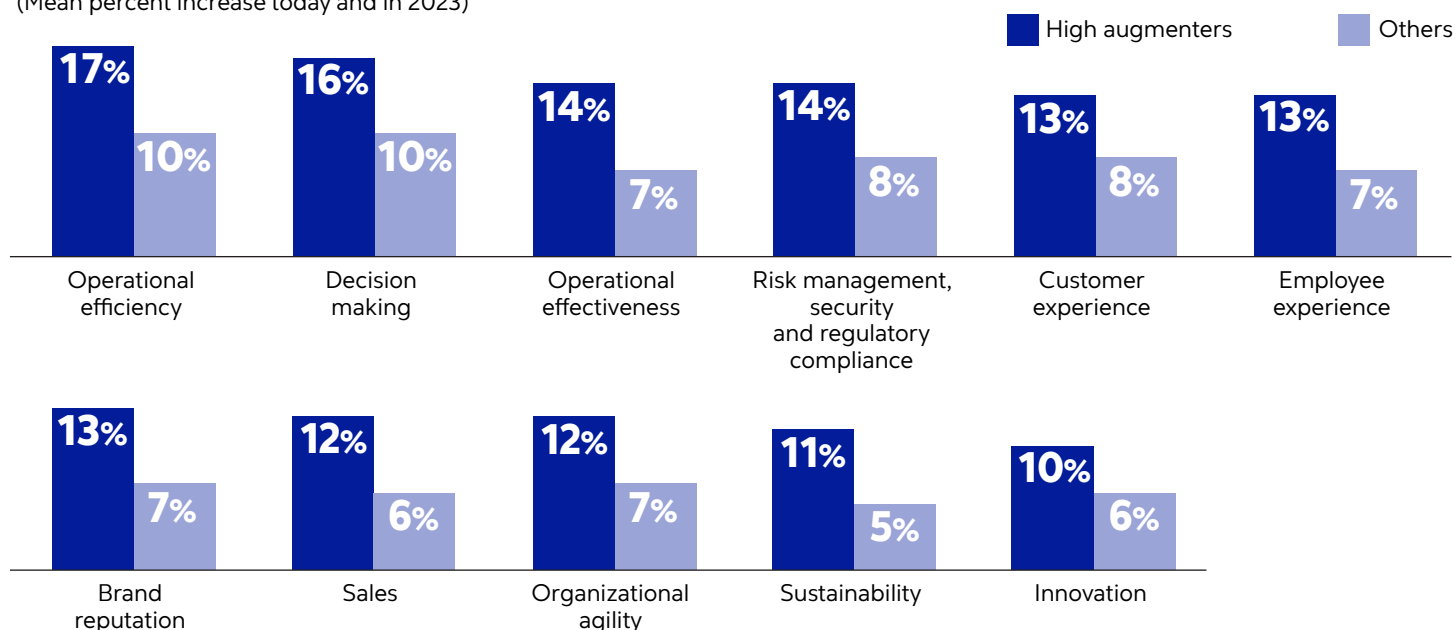
Response base: 1,200 senior executives

Source: Cognizant Center for the Future of Work

Figure 6

High augmenters experience greater business benefits

Respondents were asked about the progress they expect to make in the following areas with the application of advanced technologies. (Mean percent increase today and in 2023)



Response base: 114 'high augmenters'; 1,200 all respondents

Source: Cognizant Center for the Future of Work

Figure 7

Sixty-eight percent of respondents have embarked on an AI initiative. While China's AI capabilities are on par with the West, other countries in the region need to pick up the pace of innovation and adoption. Bringing AI out of the lab and into the lines of business is imperative for value realization. During the pandemic, Ping An Bank in China [rolled out AI-powered contactless consultation capabilities](#) to its customers. In just two weeks, more than three million customers had made 11.67 million transactions.²²

Are you a high augmenter?

When it comes to the benefits realized by augmenting processes with technology, most businesses appear to have so far focused mainly on achieving operational efficiencies from

their tech implementations (see Figure 7). This will change over the next two years, when the improvements they expect will be more strategic in nature, such as in the areas of decision making and customer/employee experience.

We also identified a subset of respondents who had augmented two or more business processes with technology than the others – we call this group “high augmenters.” Interestingly, high augmenters report significantly greater business benefits than other respondents, at about five percentage points higher in all categories. These respondents are making better decisions, generating greater operational efficiencies, and managing risk and security more effectively. The upshot: The more that businesses use technology to augment processes, the greater the business benefits.

Human-machine work: mastering the second act of digital

The second phase of digital will be marked by AI, automation, analytics and IoT – all of which are more aligned with industry and business strengths in Asia Pacific than elsewhere in the world.



As our Asia Pacific and Middle East respondents show, the work ahead is about striking a balance between machine-driven and human-centric work. Even when machines can do everything, it will still be people who are the ultimate X factor.

Here are the key actions that will help businesses augment human work with digital technologies:



Speed data to speed human intelligence.

Data changes – and grows – quickly. To stay ahead of the curve, businesses should set a target for the next 12 months to match their decision-making speed to the anticipated growth in data volumes. For instance, if you expect a 30% annual growth in data over the next 12 months, your speed for making insights and applying data intelligence needs to accelerate by 30% in the same period. Anything less will impact the speed of doing business in this fast-changing world. “Winning with data-driven decision-making” has become the number-one competitive game in nearly every industry.



Keep humans in the loop for the unknown consequences of intelligent machine failures.

Our study revealed a significant jump in executives’ concern about trust and ethics (63% in 2016 vs. 86% in 2020). Businesses need to focus on self-regulation by building ethics into AI applications and systems both at the design stage and after they launch and evolve. While there are no turnkey solutions for machine-risk management, an excellent first step is to appoint a role such as a machine risk officer or an algorithm bias auditor or amend an existing role to recognize and manage new risks and responsibilities related to machines. (For more on jobs that will emerge in the digital age, read our report “[21 More Jobs of the Future](#).”²³)



Rethink organizational and team structures.

As AI and automation take over more repetitive tasks, work demand will change team structures. Rather than larger hierarchical team structures, smaller teams will emerge that allow individuals and teams to become more fluid and flexible across roles and functions. Agile organizations emulate the speed, dynamism and customer centricity that distinguish digitally native competitors, which can pivot as quickly as customer needs do. For example, instead of concentrating technology professionals in a centralized IT department, leaders will embed software designers and engineers in independent teams, where they can be quickly deployed on high-priority goals. [Expect to see](#) multi-disciplinary teams emerge across functional departments.²⁴



Train humans to enhance their human skills.

Companies will increasingly seek job applicants who demonstrate “soft” skills, such as innovation, decision-making and leadership. These skills are not only hard to find; they’re also not easy to develop.

While it’s relatively easy to train someone on how to follow a particular process, how does one teach empathy? One way to address this problem is by focusing more on fundamental attributes and behaviors than on skills. This can be achieved through role modeling, leveraging psychologists to conduct skills assessments, mentoring and creating a work culture in which human skills are prioritized and celebrated. AIA Singapore, for instance, is preparing itself for the post-COVID-19 world [by encouraging employees](#) to embrace a culture of experimentation and innovation.²⁵



Keep away from the dark side.

This new way of working, doing business and generating value will come at a cost. Cyber fraud (66%), digital terrorism (65%) and winner-takes-all economy (64%) are the top three concerns raised by respondents concerning the impact of digital technologies on their personal and work lives. Cyber fraud is already on the rise with increased online behavior; according to the United Nations, there has been [a 350% rise in phishing websites](#) in the first quarter of 2020.²⁶ While it’s incumbent on businesses to prepare for the possibly darker side of the future of work, it’s also vital to recognize the positive impact of AI on the workforce and society.

The work ahead is about striking a balance between machine-driven and human-centric work. Even when machines can do everything, it will still be people who are the ultimate X factor.

A coming of a new age for digital

Although the digital revolution is 74 years old (the first general-purpose computer, ENIAC, was launched in 1946), it's kicking into second gear now. In the first phase, the FAANG vendors dominated (Facebook, Amazon, Apple, Netflix and Google), and the West led the global digital agenda. The second phase will be marked by AI, automation, analytics and IoT – all of which are more aligned with industry and business strengths in Asia Pacific than elsewhere in the world.

Likewise, leaders in the Asia-Pacific and the Middle East regions are now entering the next phase of their relationship with technology. They have a more measured appreciation

of technology's potential impact on work and society. With over half the world's population, over one-third of the world's economic output and a greater appetite to try out new ways of working, Asia-Pacific has everything it needs to lead in the work ahead. Companies in the region are leveraging machines to free up human workers to do what humans do best: innovate, make decisions and lead their companies out of this crisis and through future challenges.

By meeting the greater ambitions of what it means to enable human-machine work, they stand to learn much more from one another than from the West and provide an example to the rest of the world of how the future of work will unfold.



Methodology

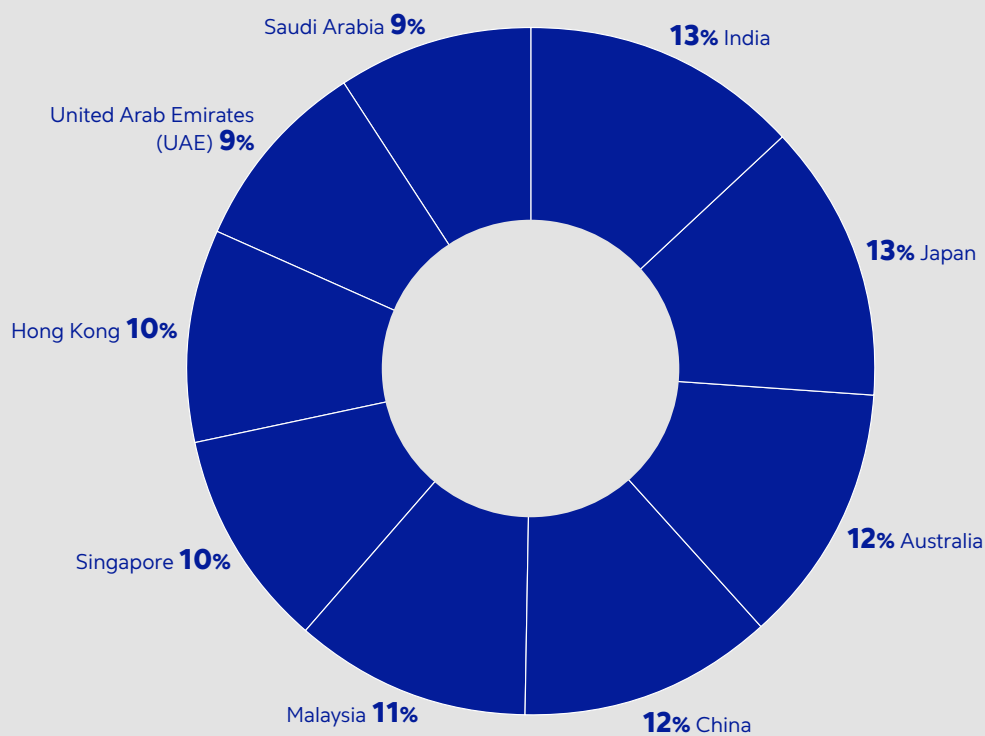
We commissioned Oxford Economics to design and conduct a survey of 4,000 C-suite and senior executives, 1,200 from Asia Pacific and the Middle East. The survey was conducted between June 2020 and August 2020 via computer-assisted telephone interviewing (CATI). Approximately one-third of the questions were identical to those asked for the 2016 Work Ahead study, allowing us to compare responses and track shifting attitudes toward technology and the future of work.

Respondents come from the U.S., Canada, UK, Ireland, France, Germany, Switzerland, Benelux (Belgium, Luxembourg, Netherlands), Nordics (Denmark, Finland, Norway, Sweden), Singapore, Australia, Malaysia, Japan, China, Hong Kong, India, Saudi Arabia and UAE. They represent 14 industries, evenly distributed across banking, consumer goods, education, healthcare (including both payers and providers), information services, insurance, life sciences, manufacturing, media and entertainment, oil and gas, retail, transportation and logistics,

travel and hospitality, and utilities. All respondents come from organizations with over \$250 million in revenue; one-third are from organizations with between \$250 million and \$499 million in revenue, one-third from organizations with between \$500 million and \$999 million in revenue, and one-third with \$1 billion or more in revenue.

In addition to the quantitative survey, Oxford Economics conducted 30 in-depth interviews with executives, spread across the countries and industries surveyed. Interviewees who responded to the survey have a track record of using emerging technology to augment business processes. The conversations covered the major themes in this report, providing real-life case studies on the challenges faced by businesses and the actions they are taking, at a time when the coronavirus pandemic was spreading around the world and companies were formulating their strategic responses. The resulting insights offer a variety of perspectives on the changing future of work.

Respondents by geography



(Percentages don't always equal 100% due to rounding)

Respondents by role



About the author



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Manish Bahl is a Cognizant Associate Vice President who leads the company's Center for the Future of Work in Asia-Pacific and the Middle East. A respected speaker and thinker, Manish has guided many Fortune 500 companies into the future of their business with his thought-provoking research and advisory skills. Within Cognizant's Center for the Future of Work, he helps ensure that the unit's original research and analysis jibes with emerging business-technology trends and dynamics in Asia Pacific, and collaborates with a wide range of leading thinkers to understand and predict how the future of work will take shape. He most recently served as Vice President, Country Manager with Forrester Research in India.

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THE WORK AHEAD



Center for
The Future of Work

About the Center for the Future of Work

Cognizant's Center for the Future of Work™ is chartered to examine how work is changing, and will change, in response to the emergence of new technologies, new business practices and new workers. The Center provides original research and analysis of work trends and dynamics, and collaborates with a wide range of business, technology and academic thinkers about what the future of work will look like as technology changes so many aspects of our working lives. For more information, visit [Cognizant.com/futureofwork](https://www.cognizant.com/futureofwork), or contact Ben Pring, Cognizant VP and Director of the Center for the Future of Work, at Benjamin.Pring@cognizant.com.

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Cognizant (Nasdaq-100: CTSI) is one of the world's leading professional services companies, transforming clients' business, operating and technology models for the digital era. Our unique industry-based, consultative approach helps clients envision, build and run more innovative and efficient businesses. Headquartered in the U.S., Cognizant is ranked 194 on the Fortune 500 and is consistently listed among the most admired companies in the world. Learn how Cognizant helps clients lead with digital at www.cognizant.com or follow us [@Cognizant](https://twitter.com/Cognizant).

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