The Work Ahead: Modernizing North America 2.0 (or, the NEXT, New American Future of Work)

The Work Ahead 2021 is a research series providing insight and guidance on how organizations are evolving on the next stages of their digital journey. In this report, we explore how C-level executives in the U.S. and Canada are incorporating digital technologies and techniques to ensure a successful future for their future of work.

**Executive Summary**

It’s the 2020s in North America. Look around. We’ve never been surrounded by more technology. But has it bred optimism — or just “optimization?” How do your co-workers or neighbors — or you — feel about it? Is it progressing, or regressing? Modern, or in retrograde?

And then – thanks to COVID-19 – along came a virus. Which sat down beside us.

Overnight, new business processes. Overnight, new conceptions of “essential work.” Epidemic gave way to pandemic with shocking speed. Your dining room table as your remote office. Proclamations about “shareholders and stakeholders,” at a time of staggering economic calamity. And don’t look now – because the skies over Silicon Valley just turned orange.

All of us are adapting – often digitally – to new ways of living, working and forging relationships. And for North American businesses, even the best-laid strategies, let alone day-to-day tactical execution, are threatened in a way that even the most technologically intensive plans could not have responded to.

**The FoW became the NoW (the *Now* of Work).**

From movie theaters to big box retailers, main street merchants to airlines to hotels, the coronavirus has had a major impact on North American business as we know it. While the death toll worldwide is staggering, the impact of social distancing, remote working, layoffs and the future of your business – and society – also foreshadow accelerating change. If you don’t have the answers – or haven’t even considered the right questions to ask – there’s a strong chance you could be on the wrong side of history.

It’s in this spirit that we relaunched our Work Ahead series, begun in 2016 to provide insight and guidance on how organizations are evolving in the next stage of the digital world. We partnered with Oxford Economic in June 2020 to survey 1,400 senior executives (1,300 of which were in the U.S., and 100 in Canada) across industries to gauge how work – and jobs – continue to evolve with the increased primacy of digital technologies and techniques. In this report, we focus on what the future holds for the digitization of U.S. and Canadian businesses and assess what’s next for the future of work (see methodology, page XX).

Through our findings, we believe that the roughly US$22 trillion combined economic engine of the United States and Canada – despite tremendous headwinds – is still a mighty force for responding to the vast changes inflicted by the shocks of 2020. In addition to having some of the most sophisticated digital technologies at its disposal, the region’s real weapon (secret, or not-so-very secret) is the adaptability of the workforce itself. While the COVID-19 pandemic threw a wrench into the country’s economic motor, with the right attention to strategy, skilling, role transitioning, and pairing with digital tools, the “blast radius” of 2020’s closed economy can act as a catapult to turbo-charge North America and propel it successfully through the remainder of the decade ahead.

Six key findings substantiate the critical lessons learned in their journeys so far:

# **Investment in the right digital-age skillsets will modernize North American work.** From the shopfloors of Main Street to the corporate suites of Wall Street and Canada’s Bay Street, the pursuit of skills development will be essential, career(s)-long needs for everyone. Fresh new ideas are in high demand among our respondents, with the most in-demand skills for the future being innovation (39%) and decision-making (38%).

# **Algorithms and AI are fueling – and changing – the modern North American business**. 73% of respondents have data analytics implementations underway, with a similar number citing AI. U.S. and Canadian organizations will depend on data… and lots of it. As cutting-edge digital technologies like these become a bigger partner in work, jobs and tasks, those companies that combine the insights that data reveals with the ability to innovate with it will thrive.

# **The American work ethic remains alive and well in the future – but “faster efficiencies” don’t always mean better outcomes.** Working faster and with greater efficiencies lead the ways our respondents think their work will change by 2023. While innovation, ingenuity and efficiency have always been a fixture of North American business, the coronavirus taught us outrunning a challenge rewards the fast – not the big.

# **The changing nature of work means a shift from jobs to tasks.** The future of work requires us to think about work far more fluidly; breaking down work into tasks is the most sustainable way to segue into a fully-fledged human-machine workforce. North American respondents think greater job specialization, more collaboration and working faster will be the leading outcomes of that change.

* **COVID – and AI – are galvanizing efforts to better value employees.** In the wake of the coronavirus, North American leaders in AI adoption are significantly more likely to believe that the next three years will witness a better ability for work to pay essential workers more (66%), augment workforce safety (65%) and provide greater social protections for freelance workers (57%). This outlook is poised to help “make real” the stated intent of American CEOs to value stakeholders in addition to their shareholders.

As the British naturalist Charles Darwin said, “It is not the strongest of the species that survives, nor the most intelligent; it is the one most adaptable to change.” Similarly, we have no choice but to confront work ahead that will be hard, unavoidable and above all, necessary to modernize North America, and get it to the other side.

Your work ahead – not just for survival today, but personal and professional adaptation for tomorrow – is to take the wheel (and the driver’s seat), and help your company practice *working better, digitally*. Building a modern North America depends on it.

# After NAFTA: Skill Me, Thrill Me, Fulfil Me

Looking to 2023, important skills are less about formulating a strategy and more about the ability to execute on it. The top two most important skills among North American respondents have shifted from leadership and strategic thinking to innovation (39%) and decision-making (38%). What’s fallen like a stone? Global operating skills (pegged at 63% in 2016). This reflects how much corporate America has changed its outlook about “globalization” due to its voracious conceptual criticism by political leaders and resulting in the recent US-Mexico-Canada Agreement – the successor to NAFTA – which will underpin the regions trading infrastructure in the coming years.

Businesses in all industries have been doing the hard work of digital improvement in North America for years now. Since we conducted the first Work Ahead survey in 2016, the optimism has been replaced with a realism tempered by not just the hard work businesses have done to envision and implement the technologies, services and solutions that underpin modern business but also by, of course, the COVID-19 pandemic. But now, some of the urgency for change we saw in 2016 has diminished, spotlighting a shift in corporate focus away from digital growth to business survival.

Specifically, the percentage of respondents in this year’s study rating any skill as highly important for the future of work is far lower – sometimes by half – than in 2016 (see Figure 1). Initial skills gap concerns our research highlighted four years ago have seemingly subsided – implying good progress in building these skillsets over the last few years. But plenty of work ahead remains, too.

Innovation shot to the top of the list of skills needed for the future of work. But it’s paired with decision-making, which climbed from number 5 to number 2 and analytical skills, which climbed from number 8 to number 4. This isn’t your grandfather’s innovation, based on “interesting ideas” but well-formulated strategies fueled by analytics and data-driven decision making.

**Figure 1**

**Skills shift from leading and strategizing to innovation and decision-making**

*Respondents in 2020 (and back in 2016) were both asked whether each skill would be more or less important in three-years’ time for succeeding at work. (Percent of respondents naming each skill as more important)*



*Response base: 1,400 respondents*

*Source: Cognizant Center for the Future of Work*

The preeminence of need for analytical skills underscores the reliance modern companies have on data-driven decisions to guide their actions. But too many businesses, mistakenly, are over-relying on action without strategy – to use a medical analogy, it’s rushing to the cure without knowing, *really* knowing, what’s systemically wrong. You can’t formulate direction with no strategy; and neither can you divine strategy without situational awareness.

This is where practice meets preparation. As a result of COVID, entire sectors of the American workforce have been shifting[[1]](#footnote-1) – and reskilling, upskilling and cross-skilling – than ever before. The learning and development it requires reflects a seemingly improbable blend of Darwin’s adaptability maxim and Canadian hockey great Wayne Gretzky’s description of success: “Failure to prepare prepares you to fail.” On the route to the *next*, new future of work, heaven help the North American workers (and especially the industries that employ them) that don’t rise to meet their “prepare” moment.

Said one US banking COO respondent: “Even before COVID, we used to lay more emphasis on imparting digital skills to younger employees who join us fresh out of school… Currently, we are in the process of developing a revised strategic plan about training and knowledge sharing of digital skills to our relevant employees, specifically skills related to data analytics, AI, machine learning, and business intelligence through online modes. This should help us prepare for future needs”.

# X Marks the Spot

It’s the admixture of specific technologies, solutions and platforms which comprise modern digital businesses. A raft of new digital technologies has already been marshalled (either out of experimentation or desperation – or both) on everything from fraud detection, pricing, underwriting, distance learning, scheduling, supply chain optimization – you name it.

It would be myopic to believe that in a post-contagion world that the only locus of digital improvement will be in CX (customer experience), a point of fixation for most companies the last several years. For that reason, we expect to see a continued surge of businesses driving digital investments across the value chain of employee experience (EX), supplier experience (SX), partner experience (PX) and user experience (UX) too as they emerge into the new future of work, post-pandemic.

We asked executives to estimate the progress they’ve made in implementing some of the key digital technologies to augment their business process. As shown in Figure 2, data/analytics is at the top of the list with a combined 73% when it comes to pilots and deployments of technologies. AI isn’t far behind, as businesses have learned that dealing with the vast data volumes requires AI. The fact that IoT is seeing the most widespread implementation (15%) is indicative of the desire for data gathering.

Where do we go from here? When it comes to modernization and adapting business processes to digital technologies, the work ahead for North American businesses clearly revolves around those that generate massive data (like IoT), and those that yield profound insights into business performance.

Yet big, critical questions remain: Can IoT scale? Will Blockchain fall apart? When’s Apple releasing its AR glasses? And what to do with all of that data… big data… *oceans* of data… ? From data warehouses to data lakes, from hyperscale voice, video and images to cloud data storage, data’s coming in from products and devices everywhere, so migration to a modern data stack is essential work – today, tomorrow and into the foreseeable future.

If you think you’re a leader, don’t be tempted to rest, because your challengers aren’t. Even leading U.S. social media giants (Facebook, Snapchat, LinkedIn) face stiff competition as unheralded competitors like TikTok signal the future of the algorithm. It’s already partnered with North American companies like Canada’s Shopify, by driving totally new innovations in how AI – not the social graph – drive engagement (and sparking living room dancing everywhere during lockdown).

**Figure 2**

**Specific stages of North American digital technology implementation**



*Response base: 1,400 respondents*

*Source: Cognizant Center for the Future of Work*

# Practice working faster, *better* … with digital improvement

Our study found respondents are increasingly making the connection between the use of digital tools and the ability to work faster and more efficiently (see Figure 1); however, businesses need to also focus on working better – more innovatively or more strategically. From ICU nurses and doctors obtaining PPE, to bankers assisting with PPP loans, many (if not most) jobs in America are reliant on new, digital tools to not only do their job but to do it better, safer and more meaningfully, as well. In other words, to *improve* work.

If you’re a doctor making a life-or-death call, or a banker needing the facts and frameworks to help a customer get a government loan, this is essential work, work that *matters*. This is the battle between the desire for speed/productivity/efficiency and creativity/innovation and decision-making. Both are needed – one can’t be forfeited for the other. “Real time” is the only time that counts in the work ahead. Or, in the words of Professor Scott Galloway of NYU, “The world belongs to the fast – it doesn’t belong to the big.”

As shown in Figure 3, a majority in our survey (52%) agree they’ll be able to work faster because of digital technologies by 2023. Behind that, a related, buttressing outcome – that their work will be more efficient (49%) – begets the latitude and insights to “help me make better decisions” (47%). And yet: there’s a bit of a “tell” in the top fixation on fast and cheap, too, that underscores the classic (or neurotic, burnout-inducing) American work ethic of “gotta do more, gotta be more” behaviors. The percent that chose “help me think innovatively and creatively” (46%) is the same as “productivity” and not that far beyond “efficiency” – in other words, working harder doesn’t necessarily equate to working smarter.

Outcomes such as “improve my job satisfaction” (46%) are essential, as it’s become increasingly clear that employee engagement is a measurable, leading indicator of better business results, especially with so many employees working remotely. Compared with 2016, we also see a slight increase in the belief around digital technologies as an employment lifeline: that they’ll “help me stay employed” (44%) and will “help protect me from being replaced by robots and automation.” One reason for less concern is that as businesses gain more experience with AI, they see more and more examples of assistive AI technologies that enhance their jobs and decision-making capabilities. Far from “taking jobs away,” AI is helping to modernize work, allowing employees that can see its direct benefit in improving their jobs or specific tasks to become some of its best advocates.

**Figure 3**

**Senior executives’ beliefs around digital tools’ impacting their personal work**



*Response base: 1,400 respondents*

*Source: Cognizant Center for the Future of Work*

# In the Crosshairs: Our Lives, Our Data, our Privacy

When it comes to the threats like digital fraud, theft and terrorism posed by growing reliance on digital technologies, respondents’ concerns are fairly similar to those of 2016 (although the magnitude of concern is a bit more muted). So perhaps shock has given way to action and better preparedness, as concern over data privacy moved from number 2 in 2016 to number 4 (see Figure 4). Maybe it’s because we’ve become desensitized. The revelations about the “weaponization” of Facebook data by Cambridge Analytica can seem like a lifetime ago. But for those scrutinizing data protection, privacy and risk in America (including the U.S. Congress), it was a watershed moment.

If there’s one thing the hearings in the wake of Cambridge Analytica set in motion, it’s that the wheels are now turning on data protection and privacy in the U.S., and people are beginning to question (if not yet reject) the data free-for-all. The clarion call for more digital privacy gets louder and louder as proof grows about the downsides of surveillance capitalism. People don’t want ads following them around the web; they don’t want their data exposed in a breach or to experience some form of identity theft. And they certainly don’t want their data to propagate misinformation, discrimination and polarization, whether at work or at home. That 64% of respondents are worried about greater levels of exposure to digital fraud and theft and an equal number fret about digital terrorism supports this notion.

And for the bad actors out there, developments in data science innovation are arguably turning the tide; one senior insurance executive we interviewed for our research put it this way: “We collected and collated data from a number of fraudulent cases over a five-year time period (from 2012-2017). We did the analysis of this data using a predictive methodology, and the results were very close to the actual data of the fraudulent instances for 2018 and 2019. Our data science consultants were able to assess accurately the risks involved in the fraudulent transactions.”

**Figure 4**

**North American concerns regarding digital technologies**



*Response base: 1,400 respondents*

*Source: Cognizant Center for the Future of Work*

# Supporting the Workforce Today & Tomorrow

In five years (or maybe five months), when you’re interviewing top talent, they will ask you “how did you support your employees through the COVID-19 crisis?” As traditional businesses try to adapt to the headwinds of COVID-19 while mired in rigid legacy technologies, whether it’s cloud migration, modernization of processes or investments in AI pilots, digital approaches offer a lifeline to support their workforce – and their business – through the transition.

As these play out, how can the future of work help?

When it comes to using leading digital technologies, it seems the answer is “a lot.” We identified a “responsible AI implementer” cut of respondents, representing 206 respondents, who believe that both artificial intelligence and issues around trust and ethics will have a strong impact on the world of work by 2023. (For the full methodology, see page X.) We found that these leaders are the most likely to treat their workforce better and see employees not as a mere labor resource but for the value they bring to their organizations (see Figure 5).

Topping the list is a dramatic difference in these companies’ intention to foster more flexible teams, and reduce the constraints of siloed, functional departments (67% vs. 49%). The data also foretells a greater intent to pay essential workers more (66% vs. 57%), augment workforce safety (65% vs. 59%), and provide greater social protections for freelance workers (57% vs. 47%).

Across all categories, those with good progress on AI implementation will take more action to support their workforce in response to the pandemic – and foster far more flexibility and resiliency in the medium term for their businesses by doing so. For these businesses, the future of the workforce is both the fair workforce and the safe workforce. Indeed, even prior to the pandemic, CEOs from the world’s largest companies declared through their letter via the American Business Roundtable that the purpose of a corporation is not just to serve shareholders, but “to create value for all our stakeholders.”

Perhaps one of the silver linings of COVID-19 has been that it’s caused our concept of “essential workers” in America to change – fast. From frontline first responders, to medical staff, to grocery checkout clerks and stockers to teachers, these are the people who kept our families fed, healthy, informed and in relative safety and were absolutely essential to keeping our economies functioning. And getting them the right tools to maintain workplace safety will remain mission-critical, long after the pandemic is gone.

**Figure 5**

**Ethical AI implementers consistently outscore on workplace and workforce strategy**

*Respondents were asked whether they agree with the following statements about the likely impact of the pandemic on the business and workforce. (Percent of respondents who said they agree or strongly agree)*



Response base: 206 of 1,400 total respondents

Source: Cognizant Center for the Future of Work

# The Changing Nature of Work

When asked the extent to which they thought with how work would be transformed over the next three years, the top response was that “Jobs will become more specialized” because of digital transformation (See Figure 6).

Digital technologies can remove a lot of rote drudgery, and our respondents would seem to agree. Other leading workforce trends are similar to 2016, although “working faster” leaps from 10th place to third. Whether it’s collaborating more with others, working faster (there’s that American work ethic again!), or helping make jobs more strategic, it really doesn’t seem like respondents see a lot of job-killing robot terminators in sight.

Every job that anybody does today can be broken down into constituent tasks – many of which might benefit from automation. Take a look at just about any job description: From mortgage processor, to claims manager, to actor, to teacher, to nurse, to CEO, each job we do is an accumulation of tasks (far too many of which are rote and repetitive) that sum up to “the job.”

Just as the invention of the loom didn’t get rid of weavers, it increased demand for textiles (new sets of clothes, drapes, upholstery, etc.). Tasks were automated, making the weaver’s lives (and presumably their work) less intense, dull, dirty, dangerous, repetitive, etc.

How digital technologies impact North American workers at their individual job level will largely rest on the impact of these technologies on tasks or sets of work processes.

**Figure 6**

**Predictions about the changing nature of work are on track**



*Response base: 1,400 respondents*

*Source: Cognizant Center for the Future of Work*

# OUTRO

In the North America of the 2020s, digital adaptability should be a mantra for all of us. Promise and purpose depend on the actions we take individually, in our business, and in our societies to become masters of our fate. And at a time when stakeholders matter more than ever, North American businesses can show incredible leadership on everything from climate change to new ways of working.

North America 2.0 is just getting started. Business can help; as the author of the famous quote “software is eating the world”, Mark Andreesen, exhorted American companies in 2020, “It’s time to build” – that includes our businesses, towns and societies. At the same time, individually, we need to practice *working better,* by digitally improving our jobs.

As we embark on the work ahead, look around – maybe the coronavirus and great “pause” allowed us to really *see* what’s going on. The rise of robots, marshalling of machine intelligence, modern business models using digital tools, rethinking “gig” labor and safety nets — all these trends point to new regional dynamics on the frontier for the next, new American future of work.

# METHODOLOGY

Oxford Economics was commissioned by Cognizant to design and conduct a survey of 4,000 C-suite and senior executives, including 1,300 in the USA and 100 in Canada. The survey was conducted between June 2020 and August 2020 via computer-assisted telephone interviewing (CATI). Approximately a third of the questions were identical to those asked for the 2016 Work Ahead report, allowing us to compare responses and track shifting attitudes to technology and the future of work.

Respondents represent 14 industries, 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 $250m in revenue; one-third come from organizations with between $250m and $499m in revenue, one-third from organizations with between $500m and $999m in revenue, and one-third with $1bn or more in revenue.

In addition to the quantitative survey, Oxford Economics conducted 30 in-depth interviews (10 in USA) with executives, spread across the countries and industries surveyed. Interviewees had responded to the survey with 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

1. To provide real-time insight on what was happening in the U.S. temporary labor force, we teamed up with Manpower Group in April 2020 as part of our quarterly analysis of the Cognizant Jobs of the Future Index: https://www.cognizant.com/perspectives/covid-19-shreds-the-jobs-of-now-what-about-the-jobs-of-tomorrow [↑](#footnote-ref-1)