



# The Work Ahead: Modernizing North America 2.0

In the North America of the 2020s, digital adaptability should be a mantra for us all. Results from our recent Work Ahead study reveal how businesses in the region are using strategy, skilling, role transitioning and pairing with digital tools to successfully navigate the remainder of the decade ahead.

THE WORK AHEAD

## Executive Summary

Despite tremendous headwinds, the economic engine of the U.S. and Canada is still a mighty force for responding to the shocks of 2020. In addition to having some of the most sophisticated digital technologies at its disposal, the region's real weapon is the adaptability of the workforce itself.



**Businesses in North America have been changing quickly as a result of digital transformation for years. But from movie theaters to big-box retailers, and from Main Street merchants to airlines and hotels, the COVID-19 pandemic has accelerated those changes with breathtaking speed. What we once thought of as the future of work has now become the “now of work.”**

The ripple effects of social distancing, remote work, layoffs and the future of business – and society – now foreshadow an even faster pace of change. And even the best-laid strategies, let alone day-to-day tactical execution, have been challenged to the point that even the most technologically intensive plans couldn't fully support them. All of us are adapting – often digitally – to new ways of living and working, prompting new questions for North American businesses.

Will cities as we know them be “over” as places of work? Will we all work from home forever? Do I really need to take 40 (or 140?) business flights per year again? How can we safely return to the office? Will employee experience and supplier and partner experience be as important as customer experience in a year or two? Will North American reshoring and localization require a complete about-turn for how multinationals operate?

If you don't have the answers to these and a host of other questions about the work ahead – or haven't even considered the right questions to ask – there's a strong chance you could be on the wrong side of history. The good news is that amid all the disruption, it's not too late to begin the process of fundamental, digitally powered change.

## **The FoW becomes the NoW (the Now of Work)**

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 to the next stage of the digital world. We partnered with Oxford Economics in June 2020 to survey 4,000 senior executives (1,300 of whom were in the U.S., and 100 in Canada) across industries to gauge how work – and jobs – continue to evolve with the increasing primacy of digital technologies and techniques. In this report, we focus on what the future holds for U.S. and Canadian businesses and assess what's next for the future of work (see methodology, page 23).

Through our findings, we believe that the roughly US\$22 trillion combined economic engine of the U.S. 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 region'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 propel North America successfully through the remainder of the decade ahead.



Five key findings substantiate the critical lessons learned by North American businesses in their journeys so far:

- 1 **Investment in the right 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 an essential, career(s)-long need for everyone. Fresh new ideas are in high demand among our respondents, with the most in-demand skills by 2023 being analytical skills (59%) and decision-making (59%).
- 2 **Algorithms and AI are fueling – and changing – the modern North American business.** Nearly three-quarters of respondents (73%) have data analytics implementations underway, and a similar number is employing artificial intelligence (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 data-driven insights with the ability to innovate will thrive.
- 3 **The American ethic of “working faster and harder” will endure as a technology-assisted feature in the future of work.** Speed and efficiency top the list when it comes to how respondents think work will change by 2023. While innovation, ingenuity and efficiency have always been a fixture of North American business (and faster doesn't always mean better), the coronavirus taught us that outrunning a challenge rewards the fast – not the big.

- 4 **The changing nature of work means a shift from jobs to tasks.** The future of work requires us to think about work 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 the leading outcomes of that change will be greater job specialization, more collaboration and the ability to work more quickly.
- 5 **COVID – and AI – are galvanizing efforts to more highly value employees.** In the wake of the coronavirus, businesses in North America that are the furthest ahead in their adoption of AI and AI ethics are significantly more likely to believe that the next three years will witness higher pay for essential workers (66%), augmented workforce safety (65%) and greater social protections for freelance workers (57%). With this outlook, these businesses are poised to help “make real” the stated intent of American CEOs to [value stakeholders in addition to shareholders](#).<sup>1</sup>

As the British naturalist Charles Darwin [purportedly said](#), “It is not the strongest of the species that survives, nor the most intelligent; it is the one most adaptable to change.”<sup>2</sup> 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 to the other side of this crisis.

The work ahead – not just for survival today, but also for personal and professional adaptation for tomorrow – is to take the wheel (and the driver's seat), and help our businesses practice working better, digitally. Building a modern North America depends on it.

## “Failure to prepare ... prepares you to fail”

In the COVID era, the most important skills are less about formulating a strategy and more about the ability to execute on a strategic plan through innovation and decision-making.



**In 2016, when we undertook our first Work Ahead study, leadership and strategic thinking topped the list of skills considered essential at the time. Our current study, however, takes a glimpse into the future skills that will be more important by 2023. As shown in Figure 1, analytical (59%) and decision-making (59%) skills will take precedence in North America, followed by learning (56%), strategic thinking (56%) and leadership skills (55%).**

When it comes to the fast action required in the right-here, right-now COVID era of today, the most important skills are less about formulating a strategy and more about the ability to execute on a strategic plan through innovation (39%) and decision-making (38%). In fact, innovation shot to the top of the list from sixth place in 2016 and, importantly, is paired with decision-making, which climbed from fifth place to second, and analytical

skills, which climbed from eight place to fourth. This isn't your grandfather's innovation, based on "interesting ideas" but on well-formulated strategies fueled by analytics and data-driven decision making. The prominent need for analytical skills underscores the reliance modern companies have on data-driven decisions to guide their actions, both today and in 2023.

## Skills shift from leading and strategizing, to innovation, decision-making and analysis

Respondents were asked whether each skill was more or less important than previously for succeeding at work and whether they'd become more or less important by 2023. (Percent of respondents naming each skill as more important)

IMPORTANCE	2016	Today	By 2023
1	Leadership (67%)	Innovation (39%)	Analytical (59%)
2	Strategic thinking (64%)	Decision-making (38%)	Decision-making (59%)
3	Global operating (63%)	Leadership (37%)	Learning (56%)
4	Customer care (63%)	Analytical (36%)	Strategic thinking (56%)
5	Decision-making (63%)	Communication (32%)	Leadership (55%)
6	Innovation (62%)	Strategic thinking (31%)	Communication (53%)
7	Selling (60%)	Customer care (28%)	Customer care (53%)
8	Analytical (59%)	Interpersonal (25%)	Innovation (47%)
9	Communication (57%)	Selling (25%)	Interpersonal (47%)
10	Learning (51%)	Learning (20%)	Selling (47%)

Response base: 1,400 senior executives (current study); 800 senior executives (2016 study)

Source: Cognizant Center for the Future of Work

Figure 1

It's notable that the percentage of respondents in the current study who rate any skill as highly important for work today is far lower – sometimes by half – than in 2016. One explanation for this phenomenon is that the concerns about skills gaps highlighted by our earlier research has somewhat subsided, signaling good progress in building these skillsets over the last few years.

A further explanation is that businesses in all industries have been doing the hard work of digital improvement in North America for years now. The optimism of our 2016 study 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. Some of the urgency for change we saw in 2016 has morphed from a focus on digital growth to business survival.

Meanwhile, a skill that's fallen like a stone in respondents' estimation is global operating skills, which dropped from third place in 2016 to below tenth today and in 2023. This reflects how much corporate America has changed its outlook about “globalization” due to the voracious conceptual criticism by political leaders that resulted in the recent [U.S.-Mexico-Canada Agreement](#) – the successor to NAFTA – that will underpin the region's trading infrastructure in the coming years.<sup>3</sup>

Put simply, action is essential today, but so is strategy. As one of our respondents, a U.S. banking chief operating officer, said, “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're 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.”

This is where practice meets preparation. As a result of COVID, entire sectors of the American workforce [have been shifting](#) – and reskilling, upskilling and cross-skilling – than ever before.<sup>4</sup> The learning and development effort required to support this shift reflects a seemingly improbable blend of Darwin's adaptability maxim and Benjamin Franklin's [definition of success](#) (not to mention a favorite inspirational quote of Canadian hockey great Wayne Gretzky): “By failing to prepare, you are preparing to fail.”<sup>5</sup> On route to the *next*, new future of work, heaven help the North American workers (and especially the industries that employ them) who don't remember their Darwin, Franklin and Gretzky – and rise to meet their “prepare” moment.

The prominent need for analytical skills underscores the reliance modern companies have on data-driven decisions to guide their actions, both today and in 2023.



# X marks the spot

The work ahead for North American businesses clearly revolves around augmenting processes with technologies that either generate massive data volumes (like IoT) or that yield profound insights into business performance.





**In a post-contagion world, the locus of digital improvement needs to move beyond 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, supplier experience, partner experience and user experience as they emerge into the new future of work, post-pandemic.**

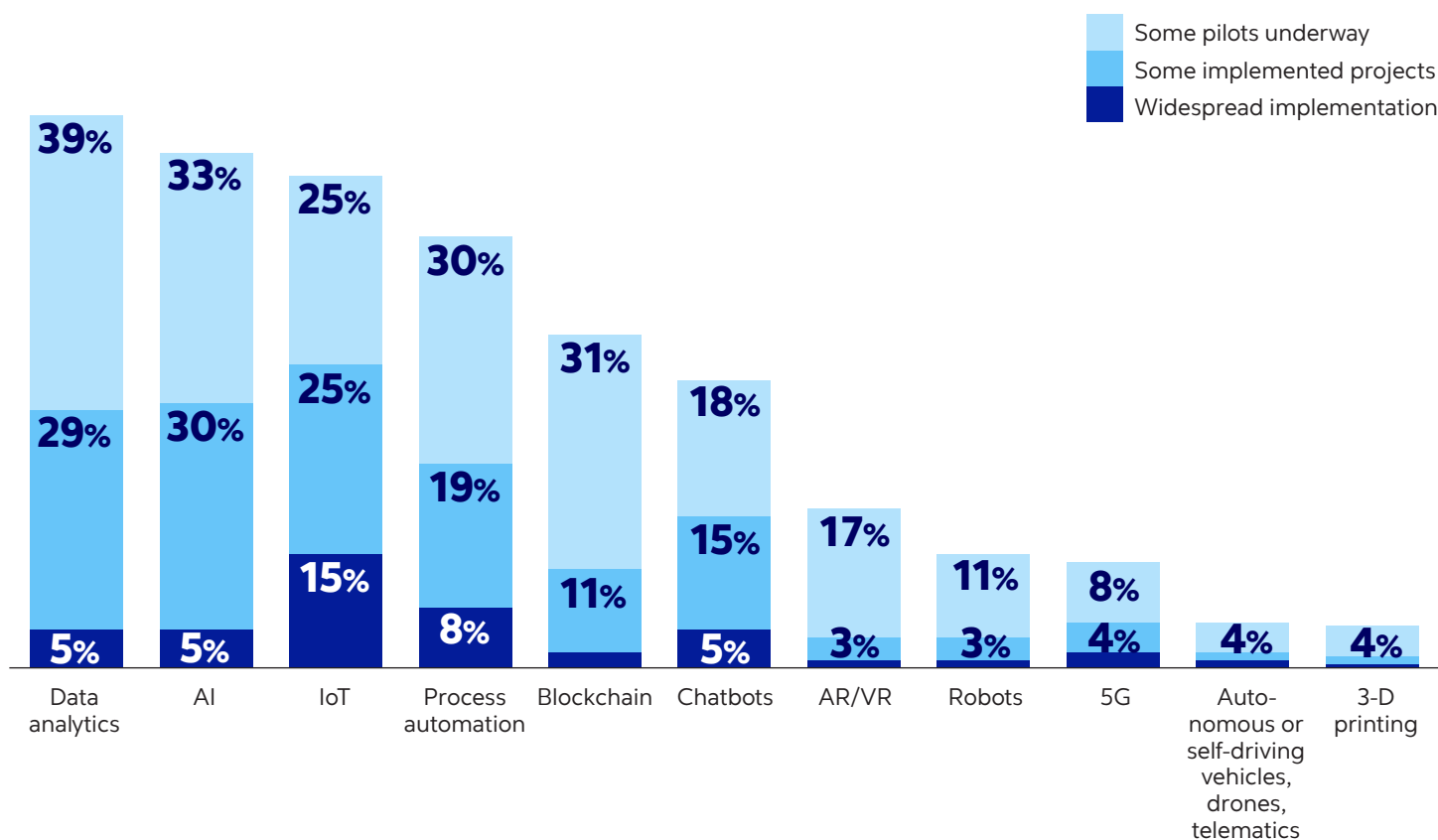
No matter where businesses focus, however, it's clear that data will be at the center of it. We asked executives to estimate the progress they've made in implementing key advanced technologies to augment their business processes. As shown in Figure 2, data/analytics tops the list, with 73% of respondents piloting or deploying this set of technologies. AI isn't far behind, as businesses have learned that dealing with vast data volumes requires AI. The fact that IoT is seeing the most widespread

implementation (15%) is indicative of the desire for data gathering.

Gauging from these responses, the work ahead for North American businesses clearly revolves around augmenting processes with technologies that either generate massive data volumes (like IoT) or that yield profound insights into business performance.

## Data-focused technologies top the list

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



Response base: 1,400 senior executives

Source: Cognizant Center for the Future of Work

Figure 2



Yet critical questions remain: Can IoT scale? Will blockchain fall apart? When is Apple releasing its augmented reality glasses? And what to do with all that data ... big data ... oceans of data ...? From data warehouses to data lakes, from hyperscale voice, video and images to cloud data storage, data is 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 unexpected competitors like TikTok signal the future of the algorithm. The upstart video-sharing service has already partnered with North American companies [like Canada's Shopify](#) by driving totally new innovations in how AI – not the social graph – drives engagement (and sparks living room dancing everywhere during lockdown).<sup>6</sup>

Data is coming in from products and devices everywhere, so migration to a modern data stack is essential work – today, tomorrow and into the foreseeable future.

## Practice working faster and better ... with digital improvement

Expected outcomes from digital tools reveal the battle between the need for speed/productivity/efficiency and the desire for creativity/innovation and decision making. All are needed – none can be forfeited for the other.





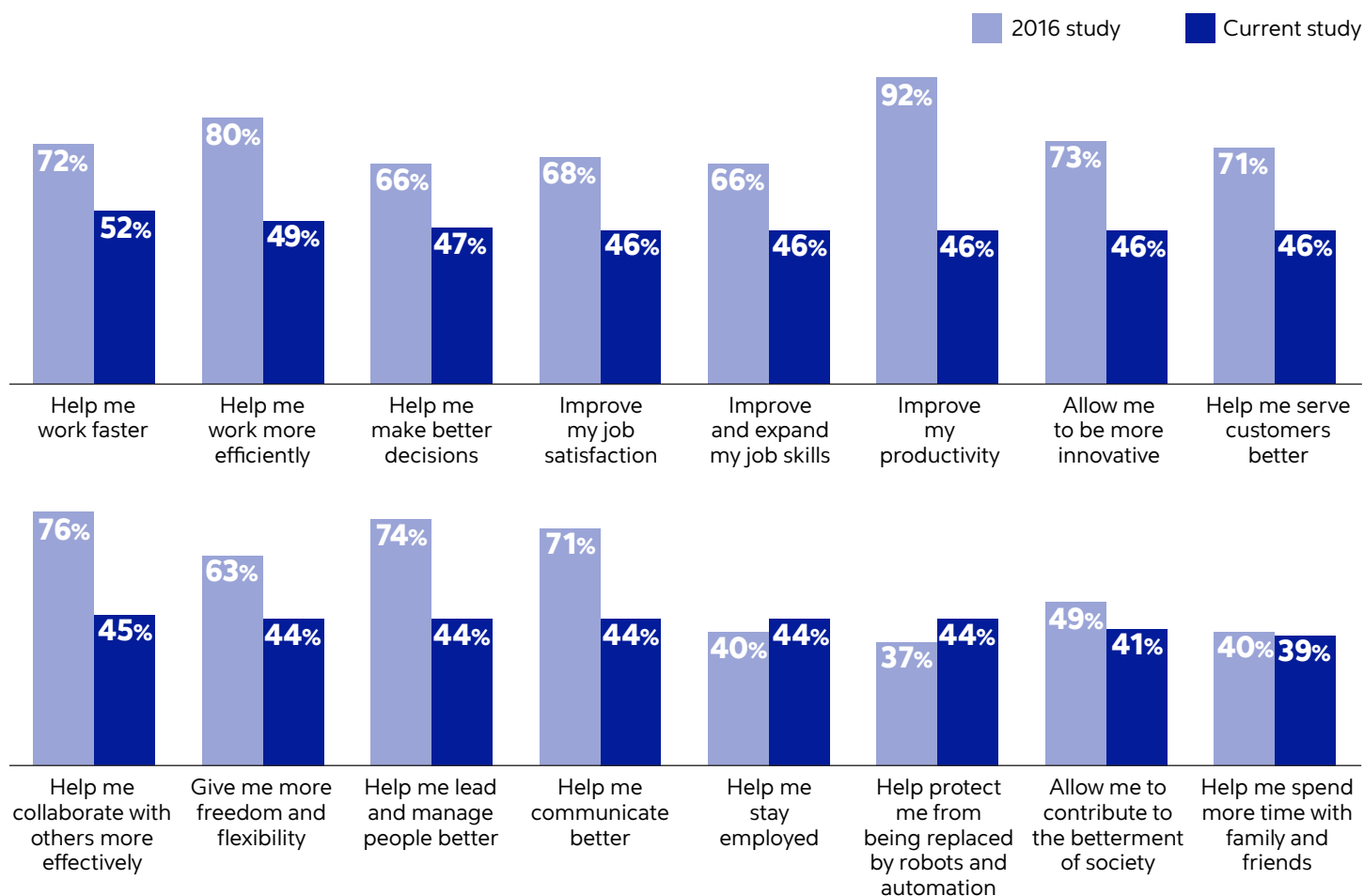
In keeping with the **American ethic of “working faster and harder,”** our study found respondents are increasingly making the connection between the use of digital tools and the ability to work more quickly and efficiently. As seen in Figure 3, a majority or near majority of respondents agree they’ll be able to work faster (52%) or more efficiently (49%) because of digital technologies by 2023. These findings underscore the classic (or neurotic, burnout-inducing) ~~American~~ work ethic of “gotta do more, gotta be more” behaviors.

Yet there’s a bit of a “tell” in the top fixation on fast and cheap: The percent of respondents that chose “help me make better decisions” (47%) and “help me think innovatively and creatively” (46%) is not far behind the fast-and-cheap crowd and, in fact, is very close to or the same as those citing “productivity” (46%). Clearly, respondents realize that working harder doesn’t necessarily equate to working smarter.

The fact is, businesses need to also focus on working better – more innovatively or more strategically. From ICU nurses and doctors obtaining PPE, to financial services companies assisting with PPP loans, many (if not most) jobs in America are reliant on new, digital tools to not only do their jobs but to also do it better, safer and more meaningfully, as well. In other words, to *improve* work.

## Impact of digital tools on work and jobs

Respondents were asked whether they agree or disagree with statements about the impact of digital technologies on their job in the next three years. (Percent of respondents who agree)



Response base: 1,400 senior executives (current study); 800 senior executives (2016 study)

Source: Cognizant Center for the Future of Work

Figure 3

At the same time, if there's one thing we've learned from the coronavirus, it's that perfection is the enemy of the good, and that "real-time" is the only time that matters in the work ahead. If you're a doctor making a life-or-death call where speed is of the essence, or a banker needing the facts and frameworks to help a customer get a government loan to help feed a food-insecure family, this is essential and meaningful work that also needs to be fast.

This is the battle between the need for speed/productivity/efficiency and the desire for creativity/innovation and decision-making. All are needed – none can be forfeited for the other. Or [in the words of Scott Galloway](#), author and professor of marketing at New York University, "The world does not belong to the big, but to the fast."<sup>7</sup>

Outcomes such as "improve my job satisfaction" (46%) are also 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.<sup>8</sup> 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" (from 40% to 44%) and will "help protect me from being replaced by robots and automation" (from 37% to 44%).

One likely reason for this diminished concern is that as businesses gain more experience with AI, they see more and more examples of assistive AI technologies that enhance jobs and decision-making capabilities. Far from "taking jobs away," AI is helping to modernize work, encouraging employees who can see its direct impact on improving their jobs or specific tasks to become some of its best advocates.





# In the crosshairs: our lives, our data our privacy

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.





## When it comes to 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 muted.

Concern over data privacy moved from second place in 2016 to fourth in our current study (see Figure 4). Perhaps shock has given way to action and better preparedness, or maybe we've become desensitized. Revelations about the "weaponization" of Facebook data by Cambridge Analytica can seem like a lifetime ago, but it was a watershed moment for those scrutinizing data protection, privacy and risk in America.

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](#).<sup>9</sup> People don't want ads following them around the web; they

## Fraud, terrorism top concerns regarding digital technologies

Respondents were asked to rate their concern about the possible impact on work and home life due to new technology and business trends. (Percent of respondents citing moderate or high concern)

2016	IMPORTANCE	Current study
Digital terrorism will become more common (87%)	1	People will be more exposed to fraud and theft (64%)
Personal information of people will be disclosed or over-shared (87%)	2	Digital terrorism will become more common (64%)
People will be more exposed to fraud and theft (81%)	3	We are moving towards a 'winner-take-all-economy' (the billionaires will get everything) (61%)
Being 'always on, always connected' will mean we have less personal freedom or free time (80%)	4	Personal information of people will be disclosed or over-shared (58%)
We will be overwhelmed by information in our daily lives (80%)	5	Being 'always on, always connected' will mean we have less personal freedom or free time (55%)
Technology will make us all more disconnected from people we care about (73%)	6	So much digital information will cause a decline in critical thinking skills (54%)
Automated technology (robots) will take jobs from people I care about (and maybe me) (73%)	7	Automated technology (robots) will take jobs from people I care about (and maybe me) (54%)
Technology will erode the division between my personal and work life (73%)	8	We will be overwhelmed by information in our daily lives (53%)
Technology will create more stress at home and the office (70%)	9	Technology will cause us to lose our individuality (53%)
Government will snoop on me and my neighbors (67%)	10	Technology will erode the division between my personal and work life (52%)

Response base: 1,400 senior executives (current study); 800 senior executives (2016 study)

Source: Cognizant Center for the Future of Work

Figure 4



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. The fact 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, data science innovations are arguably turning the tide; one senior insurance executive in our study 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."

The clarion call for more digital privacy gets louder and louder as proof grows about the downsides of surveillance capitalism.

## The changing nature of work

In the near future, when you're interviewing top talent, they will ask you "how did you support your employees through the COVID-19 crisis?" The answer, it's becoming clear, lies in the degree to which you've not only invested in digital technologies but also realized the issues around them.



**Digital technologies can remove a lot of rote drudgery, and our respondents would seem to agree. When asked about the extent to which they thought work would be transformed over the next three years, the top response was that “jobs will become more specialized” (see Figure 5). This dynamic can be attributed to the fact that every job 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.” How digital technologies impact North American workers at the individual job level will largely rest on the impact of these technologies on these discrete tasks or sets of work processes, not the entire “job.” The tasks that are not addressed through automation will likely be more specialized and more aligned with human strengths.

Other leading workforce trends are similar to 2016, although “working faster” leapt from tenth place to third (there’s that **American** work ethic again!). Whether it’s collaborating more with others or doing work that’s more strategic, it really doesn’t seem like respondents see many job-killing robots in sight.

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 weavers’ lives (and presumably their work) less intense, dull, dirty, dangerous, repetitive, etc.

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

Respondents were asked how much they agree with the following statements on how work will be transformed in the next three years. (Percent of respondents who strongly agreed)

2016	IMPORTANCE	Current study
As tasks are automated, work will become more strategic <b>(60%)</b>	1	Jobs will become more specialized <b>(50%)</b>
We will collaborate with smart machines that augment job effectiveness <b>(57%)</b>	2	We will collaborate more with other workers <b>(43%)</b>
Jobs will become more specialized <b>(56%)</b>	3	We will work faster <b>(43%)</b>
We will have the tools to make better decisions at work <b>(53%)</b>	4	As tasks are automated, work will become more strategic <b>(42%)</b>
Work will require greater technical expertise <b>(51%)</b>	5	We will collaborate with smart machines that augment job effectiveness <b>(41%)</b>
We will collaborate more with other workers <b>(51%)</b>	6	Jobs and the required skills will change significantly <b>(41%)</b>
Jobs and the required skills will change significantly <b>(50%)</b>	7	We will have the tools to make better decisions at work <b>(41%)</b>
Many elements of work will be automated <b>(48%)</b>	8	Work will require greater technical expertise <b>(40%)</b>
With access to more data, work will become more analytical <b>(46%)</b>	9	Many elements of work will be automated <b>(40%)</b>
We will work faster <b>(46%)</b>	10	With access to more data, work will become more analytical <b>(39%)</b>

Response base: 1,400 senior executives (current study); 800 senior executives (2016 study)

Source: Cognizant Center for the Future of Work

Figure 5

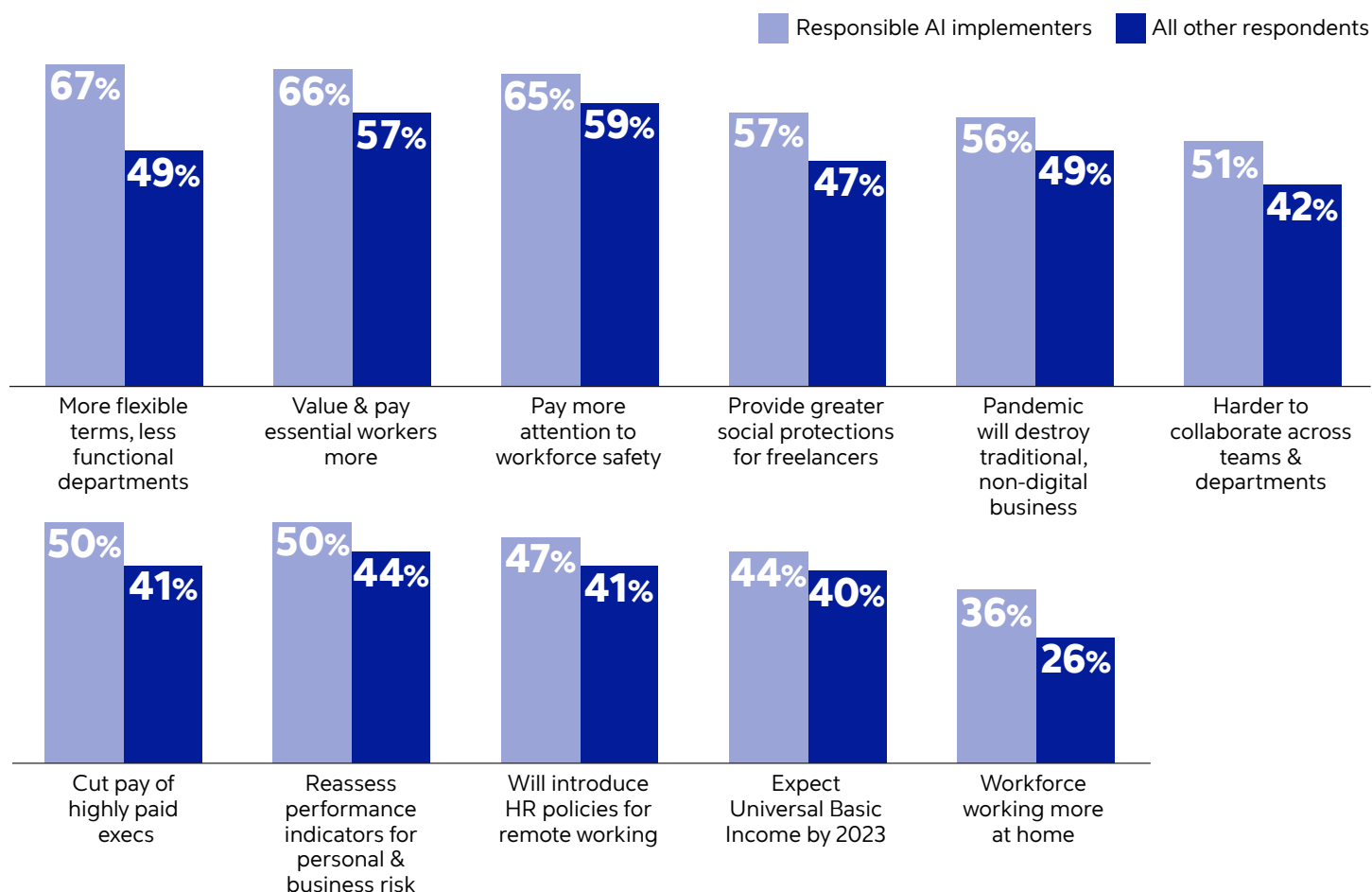
## Supporting the workforce, today and tomorrow

In the near future, when you're interviewing top talent, they will ask you "how did you support your employees through the COVID-19 crisis?" The answer, it's becoming clear, lies in the degree to which you've not only invested in digital technologies but also realized the issues around them. As traditional businesses try to adapt to the headwinds of COVID-19 while mired in rigid legacy technologies, it's digital approaches – whether cloud migration, modernization of processes or investments in AI – that will offer a lifeline to support the workforce and the business through the transition.

In particular, we discovered a correlation between respondents who are particularly tuned into AI and AI ethics and a propensity for making changes that benefit workforce wellness and workplace functionality. We identified a "responsible AI implementer" cut of respondents, representing 206 respondents who believe that both AI and issues around trust and ethics will have a strong impact on the world of work by 2023. 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 the organization (see Figure 6).

## Organizations that prioritize AI and AI ethics 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: 1,400 total respondents; 206 "responsible AI implementers"

Source: Cognizant Center for the Future of Work

Figure 6

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 who've made greater 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. This sentiment echoes the convictions voiced prior to the pandemic, when the Business Roundtable, representing CEOs from the world's largest companies, **declared** that the purpose of a corporation is not just to serve shareholders, but “to create value for all our stakeholders.”<sup>10</sup>

Perhaps a silver lining of COVID-19 has been the elevation in corporate America's concept of “essential workers.” From frontline first responders, to medical staff, to grocery checkout clerks and stockers to teachers, these are the people who've kept our families fed and in relative safety and kept our economies functioning. Getting them the right tools to maintain workplace safety will remain mission-critical, long after the pandemic is gone.

## Working to build North America 2.0

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. As Marc Andreessen of “software is eating the world” fame said in response to the pandemic, “**It's time to build.**”<sup>11</sup> This exhortation was rightly aimed at 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, the marshalling of machine intelligence, the use of modern business models using digital tools, the rethinking of “gig” labor and safety nets — all these trends point to new regional dynamics on the frontier for the next, new American future of work.

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# Methodology

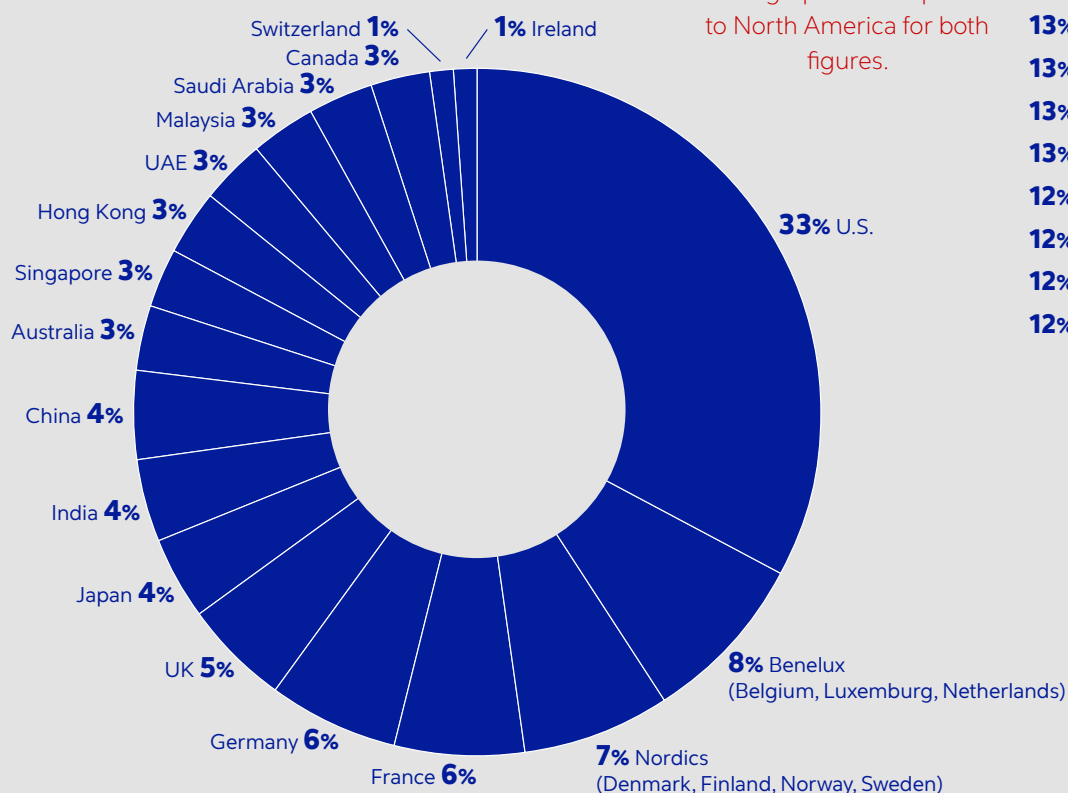
Cognizant commissioned Oxford Economics to design and conduct a survey of 4,000 C-suite and senior executives, including 1,300 in the U.S. and 100 in Canada. The survey was conducted between June 2020 and August 2020 via computer-assisted telephone interviewing (CATI). Approximately one-third of the questions were identical to those included in the 2016 Work Ahead study, allowing us to compare responses and track shifting attitudes toward 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 \$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 (10 in the U.S.) 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



## Respondents by role

13%	Vice President
13%	Chief Operating Officer
13%	Director reporting to senior executive
13%	Senior Vice President
12%	President
12%	Chief Executive Officer
12%	Chief Financial Officer
12%	Other C-suite Officer

# Endnotes

- <sup>1</sup> “Business Leaders: The Shift to Stakeholder Capitalism Is Up to Us,” World Economic Forum, Jan. 9, 2020, [www.weforum.org/agenda/2020/01/shift-to-stakeholder-capitalism-is-up-to-us/](https://www.weforum.org/agenda/2020/01/shift-to-stakeholder-capitalism-is-up-to-us/).
- <sup>2</sup> Quote Investigator website: <https://quoteinvestigator.com/2014/05/04/adapt/>.
- <sup>3</sup> “U.S.-Mexico-Canada Agreement,” Office of the U.S. Trade Representative, <https://ustr.gov/trade-agreements/free-trade-agreements/united-states-mexico-canada-agreement>
- <sup>4</sup> To provide real-time insight on 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: [www.cognizant.com/perspectives/covid-19-shreds-the-jobs-of-now-what-about-the-jobs-of-tomorrow](http://www.cognizant.com/perspectives/covid-19-shreds-the-jobs-of-now-what-about-the-jobs-of-tomorrow).
- <sup>5</sup> Wayne Gretzky was recently asked at a Cognizant event if he had a favorite inspirational quote, and he responded with a riff on Franklin’s sage advice, saying, “‘Failure to prepare ... prepares you to fail.’ My dad used to say that to me, and I’ve always remembered it and lived by it.”
- <sup>6</sup> Sarah Perez, “TikTok Partners with Shopify on Social Commerce,” TechCrunch, Oct. 27, 2020, <https://techcrunch.com/2020/10/27/tiktok-invests-in-social-commerce-via-new-shopify-partnership/>.
- <sup>7</sup> A tweet from Scott Galloway, author and professor of marketing at New York University: <https://twitter.com/profgalloway/status/1015265438144622592?lang=en>.
- <sup>8</sup> “What It Means to Belong at Work,” Cognizant, Feb. 21, 2020, [www.cognizant.com/perspectives/what-it-means-to-belong-at-work](http://www.cognizant.com/perspectives/what-it-means-to-belong-at-work).
- <sup>9</sup> John Laidler, “High Tech Is Watching You,” *The Harvard Gazette*, March 4, 2019, <https://news.harvard.edu/gazette/story/2019/03/harvard-professor-says-surveillance-capitalism-is-undermining-democracy/>.
- <sup>10</sup> Dale Buss, “CEOs in Business Roundtable ‘Redefine’ Corporate Purpose to Stretch Beyond Shareholders,” *Chief Executive*, Aug. 19, 2019, <https://chiefexecutive.net/ceos-in-business-roundtable-redefine-corporate-purpose-to-stretch-beyond-shareholders/>.
- <sup>11</sup> Marc Andreessen, “It’s Time to Build,” Andreessen Horowitz, <https://a16z.com/2020/04/18/its-time-to-build/>.

## About the author

**Robert H. Brown****Vice President, Cognizant's Center for the Future of Work**

Robert Hoyle Brown is a Vice President in Cognizant's Center for the Future of Work. Since joining Cognizant in 2014, he has specialized on the topics of robotics, automation and augmented reality and their impact on business processes. He has worked extensively with the Cognizant Digital Operations Practice as head of market strategy, and also with Cognizant's Accelerator leadership to drive the development of its intelligent automation strategy, messaging and go-to-market outreach.

Robert is a fellow at the Fisher Center for Business Analytics at the Haas School of Business at the University of California at Berkeley. Through Berkeley, he is a member of the advisory board for the Alliance for Inclusion in AI, to support the advancement of more women and underrepresented minorities in the fields of analytics and AI. Robert is also a member of the World Economic Forum's Global Future Council on the New Agenda for Work, Wages and Job Creation.

Prior to joining Cognizant, he was Managing Vice President of the Business and Applications Services team at Gartner, and as a research analyst, he was a recognized subject matter expert in BPO. He also held roles at Hewlett-Packard and G2 Research, a boutique outsourcing research firm in Silicon Valley. He holds a bachelor's degree from the University of California at Berkeley and, prior to his graduation, attended the London School of Economics as a Hansard Scholar.

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# THE WORK AHEAD



Center for  
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## 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](mailto:Benjamin.Pring@cognizant.com).

## About Cognizant

Cognizant (Nasdaq-100: CTSH) 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](https://www.cognizant.com) or follow us [@Cognizant](https://twitter.com/Cognizant).

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