

Digital Mastery

How organizations have progressed in their digital transformations over the past two years



Executive Summary – key takeaways

Organizations have advanced their digital and leadership capabilities over the past two years

On average, 60% of organizations today say they have the digital capabilities and 62% say they have the leadership capabilities required for digital transformation – up 24% and 26% from 2018, respectively. We realize the scale of increase from 2018 to 2020 that our research reveals is vast. There is no doubt that the COVID-19 pandemic has forced many companies to reinvent themselves and accelerate their transformation. Given this urgency for change – and less resistance to it – it could be that respondents are more enthusiastic and optimistic about the maturity of their organization's overall capabilities today. Since they were witnessing such a rapid pace of capability building in areas such as virtual work and communication and collaboration tools at the start of the pandemic, they might have tended to over-estimate or inflate their maturity in all capabilities we tested in May and June of 2020. Therefore, this positive perception could be driving the increase from 2018 to 2020.

The COVID-19 pandemic has been a powerful accelerant, and it is also clear that organizations have taken time since 2018 to evaluate the challenges that stand in the way of success and find answers. The rapid increase in capability-building over the past two years can also be explained by:

- Increased investments in digital transformation since 2018
- Increased adoption of emerging technologies
- A renewed focus on talent and culture, operations, and business innovation.

Digital masters are widening their gap in capability-building

While all organizations are doing better in their digital transformation journeys in 2020, digital masters are increasing the distance between themselves and their competitors and peers.

- For example, in 2018, there was a 38 percentage point difference between digital masters and all other organizations who say they are testing ideas quickly as proof of concept or minimum viable product. This gap rose to 48% in 2020.
- This widening gap is likely to persist. Over one-third (34%) of digital masters plan to increase their transformation spending in the next 12 months because of COVID-19, compared to 28% of all other organizations.

Talent and culture initiatives take precedence

Our research has consistently found that culture is a top barrier to successful digital transformation. The progress organizations have shown over the past two years is encouraging, suggesting more organizations are paying attention to the importance of culture.

- For example, 67% of organizations today said they actively promote the exploration of new ideas and experimentation compared to only 35% in 2018.
- And many more organizations today involve employees in their digital initiatives 63% in 2020, up from 36% in 2018.

Upskilling, sustainability, and purpose needs more attention

More organizations are focused on upskilling employees in 2020 than they were in 2018, but the increase has not been as significant as in other areas. In addition to this slower progress in skill building, we found in 2020 that less than half of organizations (48%) say they are investing in building soft skills such as emotional intelligence, adaptability, and collaboration.

Our 2020 framework includes capabilities related to sustainability and an organization's purpose – its reason for being that goes beyond profit and articulates their impact on society. Both of these areas are increasingly important for organizations' digital transformation journeys. Our research shows that only 45% of organizations are accelerating sustainability investments, projects, and commitment and less than half of organizations (49%) are investing in emerging technologies (e.g., AI, blockchain) to tackle sustainability and climate change challenges.

By analyzing factors where digital masters pay special attention and excel, we offer four recommendations for organizations to advance their transformations

- Reinvent the employee experience and talent journey
- Embed purpose and sustainability as a core part of the business
- Become a data-powered enterprise and reimagine the customer experience
- Scale new business and consumer engagement models.

Introduction

In our 2012 research with the MIT Center for Digital Business, we established that a high-performing cohort of organizations – digital masters – outperformed their peers in every industry.¹ In 2018, we questioned whether organizations were turning their digital investments into successful transformation journeys and undertook research to gauge whether they had indeed mastered the art and the science of digital transformation.

Our 2018 research did not find a clear advancement. Organizations were still struggling to make a success of their investments, reflecting the difficulty of adapting to the dizzying pace of change in technology innovation and business model disruptions, coupled with the rising expectations of markets, employees, and customers.²

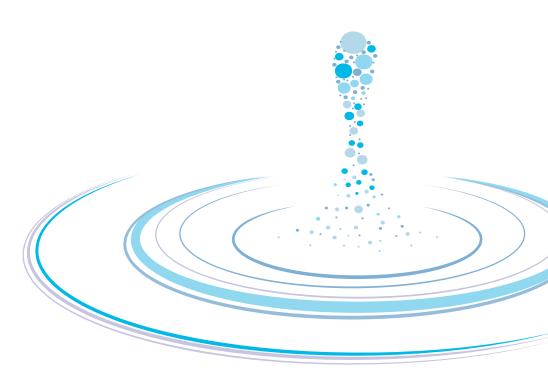
The world has changed significantly since 2018. The pace of technology innovation and business model disruption has only quickened, exacerbated by the COVID-19 pandemic forcing large organizations in all sectors to reassess their digital transformation strategies. Now, two years on, we have undertaken new research to assess whether organizations have advanced in their digital transformation journeys. We surveyed 1,000 executives around the world at the end of May and beginning of June 2020 to understand how digital transformation and capability building has progressed since 2018. We reached out to executives across sectors, including automotive, banking, consumer products, insurance, retail, telecom, and utilities. Countries included Australia, France, Germany, India, Italy, the Netherlands, Norway, Spain, Sweden, the United States, and the United Kingdom.

We found that while all organizations are doing better in their digital transformation journeys in 2020 as compared to 2018, digital masters – organizations with a high level of mastery across digital and leadership capabilities – are widening the gap between themselves and their competitors. We also updated our definition of digital mastery in 2020 to include sustainability and societal purpose given how they are emerging as critical elements of transformation journeys today and digital technologies can help turn them into reality. Today, it is also especially important to include data as a key enabler of digital capabilities.

In this report, we focus on four key areas:

- An assessment of how organizations have progressed with their digital transformations in the last two years
- The talent and culture capabilities where organizations have made progress
- What areas still pose a challenge for progressing digital transformations
- Key recommendations for how organizations can sustain their digital transformation journeys, based on the practices of digital masters.





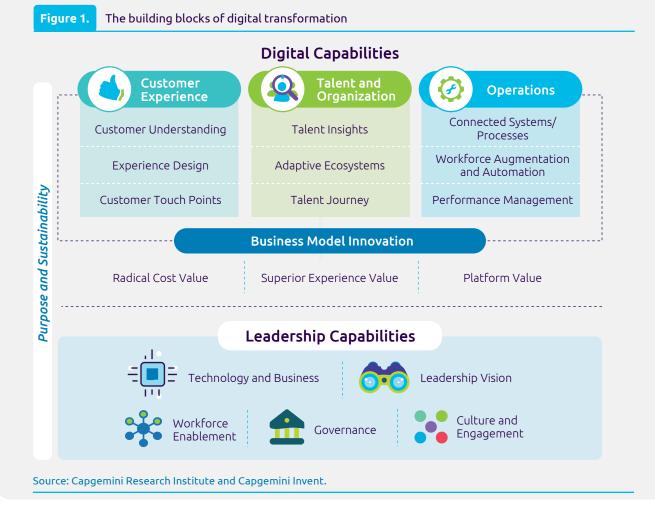
The digital mastery framework

We established our digital mastery framework in 2012 in partnership with the MIT Center for Digital Business. In our 2018 research, we evolved the model in both the digital and leadership dimensions. Organizations should progress on two dimensions to be digital masters – digital capabilities and leadership capabilities. Our 2018 definitions are below:

- **Digital capabilities** are the use of technology to change how the company interacts with customers, structures its organization and people, operates internal processes, or defines its business model.
- Leadership capabilities consist of creating the necessary conditions to drive the digital transformation in the organization. In 2018, they included the transformation vision and purpose, the governance model to lead the journey, the necessary technology and business relationships to produce the results, enabling the workforce and engaging employees in the journey.

In 2020, we took the model one step further to include capabilities related to sustainability and an organization's purpose – its reason for being that goes beyond profit and articulates their impact on society and their community. Both of these areas are increasingly important for organizations' digital transformation journeys as companies are now judged on the positive contributions they make to society and there is mounting evidence that digitalization can play a crucial role in developing sustainable solutions.³

This addition is highlighted in italics in our framework below (see Figure 1).



Organizations have made significant progress with their digital transformation journeys

More organizations today have the digital and leadership capabilities required

Two years on from our previous research, we found that organizations have indeed made significant progress on both

the digital and leadership capabilities required for success. On average, 60% of organizations today say they have the digital capabilities required – up 24% from 2018. For leadership capabilities, 62% of organizations today, on average, say they have the leadership capabilities required, compared to 36% in 2012 (see Figure 2).

Figure 2. Organizations that believe they have the digital and leadership capabilities needed: 2018 versus 2020

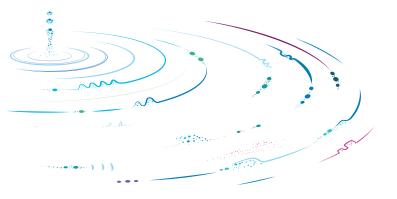


Percentage of organizations believing they have the required capabilities

Source: Capgemini Research Institute, Digital Mastery Survey, April–May 2018, N=1,338 respondents, 757 organizations; Digital Maturity Survey, May–June 2020, N=1,000 respondents.

We realize the scale of increase from 2018 to 2020 that our research reveals is vast. The COVID-19 pandemic has been a powerful accelerant, and it is also clear that organizations have taken time since 2018 to evaluate the challenges that stand in the way of success and find answers. Further, these are capabilities that organizations believe they have built upon in the last two years and may not necessarily define the transformation-driven outcomes they've realized (e.g., increase in revenue, increase in profits). At the same time, we believe there are a few different reasons to explain the rapid increase in capability-building over the past two years:

 COVID-19 as a driver of the capability increase. There is no doubt that the pandemic has been a major catalyst for organizations to pay more attention to their digital transformations. In fact, it has forced many companies to reinvent themselves and accelerate their transformation. Our recent research found that 68% of organizations say COVID-19 has already or will accelerate their transformation initiatives.⁴ Dell Technologies Digital Transformation Index puts this even higher, the global benchmarking study found that 80% of organizations have accelerated digital transformation initiatives in 2020.⁵ "We've seen two years' worth of digital transformation in two months. From remote teamwork and learning, to sales and customer service, to critical cloud infrastructure and security – we are working alongside customers every day to help them adapt and stay open for business in a world of remote everything," says Satya Nadella, CEO of Microsoft.⁶ Given this urgency for change – and less resistance to it – it could be that respondents are more enthusiastic and optimistic about the maturity of their organization's overall capabilities today. Since they were witnessing such a rapid pace of capability building in areas such as virtual work and communication and collaboration tools at the start of the pandemic, they might have tended to overestimate or inflate their maturity in all capabilities we tested in May and June of 2020. Therefore, this positive perception could be driving the increase from 2018 to 2020. It is only when we conduct a follow-up study in two years' time to measure progress, will we determine the extent of the impact of the pandemic and respondents' optimism. Might respondents' views on the maturity of their digital and leadership capabilities trend downward then?



- Increased investments in digital transformation since 2018. Even before the pandemic, organizations had increased their investments in digital transformation, which has enabled capability-building. According to the International Data Corporation (IDC), spending on the technology and services that enable digital transformation has been increasing since 2018 and will continue at a solid pace in 2020 despite the challenges presented by the COVID-19 pandemic. IDC forecasted 17.9% growth in global digital transformation spending in 2019, up from 16.8% in 2018. And in 2020, despite the pandemic, it forecasts 10.4% growth.⁷
- Increased adoption of emerging technologies. The past two years have witnessed a boom in the democratization of emerging technologies such as artificial intelligence, the internet of things (IoT), automation, and virtual and augmented reality, alongside the scaling of data and analytics capabilities. According to the Massachusetts Institute of Technology (MIT), enthusiasm for technologies such as AI is rapidly growing – 62% of organizations in a recent study increased their spend on AI projects in 2020 compared to the previous year.⁸
- A renewed focus on talent and culture. On the leadership side, organizations have paid more attention to the importance of talent, culture, and employee experience. A director of product management at a US-based retailer sees investments in digital skills and talent as helping to advance transformations. He says, "Seeing where companies are making human capital investments clearly shows that digital transformation is more important than ever before, not just for retail companies but for all companies. Any company that has not begun their journey yet will be quickly left behind in an environment where you need to lead with digital."⁹

Our research also shows that large organizations – with \$10 billion or more in revenue – have an edge in both digital and leadership capabilities compared to smaller organizations with under \$10 billion in revenue. Smaller organizations, however, are not lagging behind too much.

- For instance, 60% of all organizations say they have the required digital capabilities; this share increases to 68% for large organizations and reduces to 55% among smaller organizations.
- Likewise, for leadership capabilities, 57% of smaller organizations say they have the required leadership capabilities, which is marginally lower than the overall average of 62%. This increases to 70% among large organizations.

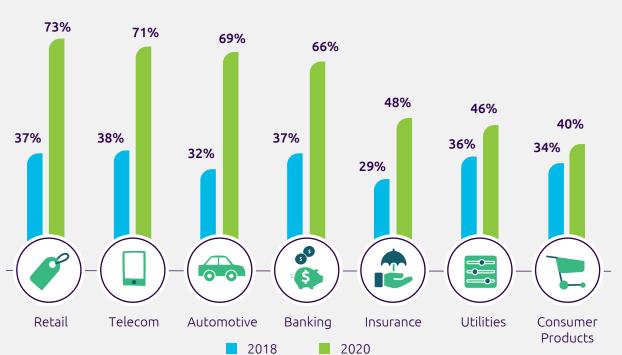
To explore the increase in capability building between 2018 and 2020 more deeply, we looked closely at the two dimensions: digital capabilities and leadership capabilities.

Sector evolution on digital and leadership capabilities

All sectors have progressed on both their digital and leadership capabilities in the past two years. In 2020, retail surpasses all other sectors, with 73% of organizations saying they have the digital capabilities required for transformation, up from 37% two years ago (see Figure 3). Retailers who have recognized the rising consumer demand for online and embraced ecommerce are driving this increase. For example, nearly 80% of the traditional retailers in the UK are now combining digital and physical channels in order to strengthen their growing click and collect orders.¹⁰ Some retail sub-sectors are doing better in progressing digital capabilities than others. Home improvement retailers lead on digital capabilities (78%) followed by grocery retailers (76%) in 2020. The automotive sector increased the most in digital capabilities – 69% in 2020 versus 32% in 2018.

After retail, the telecom sector follows with 71% of organizations saying they have the digital capabilities required. Telecom operators are reshaping the consumer value proposition by creating full-fledged digital experiences. For example, Singapore-based telecom Starhub launched Giga, a digital customer service platform for payments, identity verification, and query resolution targeting millennials.¹¹

The consumer products sector lags the most on digital capabilities. Within consumer products, the food and beverage manufacturing sub-sector leads in digital capabilities (57%), while apparel and footwear manufacturers lags behind all other sub-sectors (23%). The lag as compared to other sectors is consistent with findings from our previous research. For instance, more than half (55%) of consumers stated that the value they received from AI-enabled interactions (e.g., voice/chat interface) with consumer product organizations has been non-existent or less than what they expected. This reduces to 39% for consumers interacting with automotive organizations indicating the need for consumer product organizations to step up their digital capabilities.¹²



Percentage of organizations believing they have the required digital capabilities

Organizations by sector that believe they have the digital capabilities needed: 2018 versus 2020

Figure 3.

Source: Capgemini Research Institute, Digital Mastery Survey, April–May 2018, N=1,338 respondents, 757 organizations; Digital Maturity Survey, May–June 2020, N=1,000 respondents.



Organizations by sector that believe they have the leadership capabilities needed: 2018 versus 2020

On leadership capabilities, once again, retail leads the way with 76% of organizations saying they have the leadership capabilities required – up from 36% in 2018 and the greatest increase across all sectors. Similarly, the

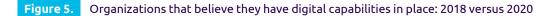
progress in leadership capabilities among consumer products lags behind the most (see Figure 4).

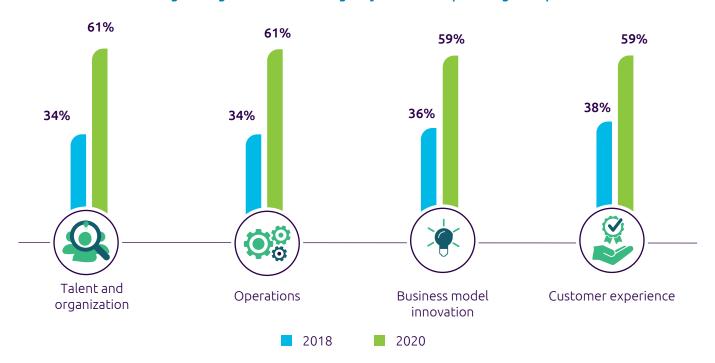
Figure 4.

Source: Capgemini Research Institute, Digital Mastery Survey, April–May 2018, N=1,338 respondents, 757 organizations; Digital Maturity Survey, May–June 2020, N=1,000 respondents.

Organizations have made headway on digital capabilities

To understand how organizations have progressed in terms of building digital capabilities over the past two years, we examined the average ratings of the four included categories – talent and organization, operations, business model innovation, and customer experience (see Figure 5). The second section of this report examines talent and organization in greater detail.





Percentage of organizations believing they have the required digital capabilities

Source: Capgemini Research Institute, Digital Mastery Survey, April–May 2018, N=1,338 respondents, 757 organizations; Digital Maturity Survey, May–June 2020, N=1,000 respondents.

- **Operations has made vast improvements.** Since 2018, operations has witnessed a 27 percentage point increase in the share of organizations saying they have these capabilities. In our 2018 research, operations was an area that posed significant challenges for organizations to execute. Today, more organizations say:
 - They have migrated their legacy IT systems to cloudbased applications (64% in 2020 compared to 34% in 2018).
 - They are monitoring operations in real time (72% in 2020 compared to 35% in 2018).
 - Their operational processes can adapt quickly to external changes (64% in 2020 compared to 29% in 2018).

- They have implemented Internet of things (IoT) technologies into their operations (62% in 2020 compared to 29% in 2018).

Technologies that support digitizing and optimizing operations has seen widespread adoption and scale in recent years. For example, industrial IoT is forecasted to grow from \$12.7 billion in 2017 to more than \$45 billion by 2022, representing a five-year compound annual growth (CAGR) of more than 29%.¹³ Worldwide spending on cloud services is projected to more than double by 2023 growing – at a five-year CAGR of 32%.¹⁴

- Business model innovation has improved significantly. In 2020, 59% of organizations say they have the required capabilities in business model innovation, compared to 36% in 2018. More companies today say:
 - They test promising ideas quickly as proof of concept/ minimum viable product (64% in 2020 compared to 35% in 2018).

 Their company adapts its structure dynamically to the changes/digital innovations in the market (63% in 2020 compared to 34% in 2018).

The most advanced sector in business model innovation is automotive with 73% of automotive organizations saying they have the required capabilities, up from only 29% in 2018. Increased investments in the automotive sector - in areas such as autonomous vehicles, mobility, electrification, and connectivity – are driving innovation. In fact, the number of deals and investment raised in autonomous driving increased to its highest ever in Q2 2020.¹⁵ The automotive sector has been focused on its transformation in recent years according to Sacha Porges, global director of customer, quality, and new programs at GKN Automotive. He says, ""We are coming to the end of our transition to Industry 4.0. The whole idea behind this is to ensure that we have the utmost efficiency using real-time data. We see this as an essential business need in order to make ourselves more efficient."16

Customer experience continues to make inroads.

Between 2012 and 2018, the customer experience was the one area that progressed while all other capabilities declined. This improvement was largely driven by widespread consumer use of mobile channels and apps and advances in analytics and connected products. In 2020, this progress continues with 59% of organizations saying they have the required capabilities in customer experience, up from 38% in 2018. More companies today say:

y. 6% %

- They use digital technologies to build contextually relevant/personalized experiences (63% in 2020 compared to 35% in 2018).
- They collect and analyze customer data at all touch points possible (62% in 2020 compared to 33% in 2018).
- They have implemented AI (e.g., chatbots, voice bots, virtual assistants, recommendation engines) to improve the customer experience (54% in 2020 compared to 35% in 2018).

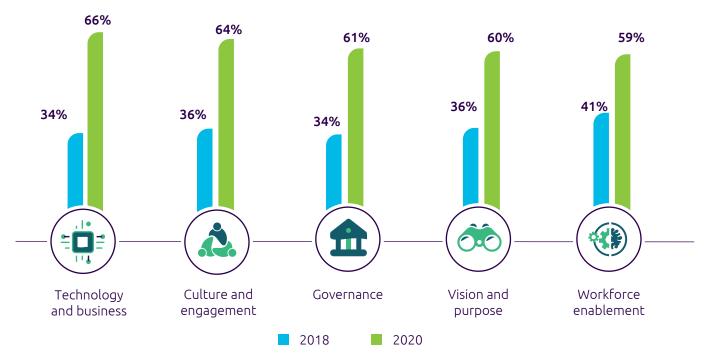
Progress in leadership capabilities has seen a marked, yet uneven, advance

As Figure 6 shows, mastery of leadership capabilities has increased across all dimensions since 2018. However, there are areas where organizations have improved to a greater extent than others. For example, while technology and business witnessed a 32% improvement over the past two years, workforce enablement increased just 18% in comparison.

61%

Percentage of organizations in 2020 that say they have the required digital capabilities in operations

Figure 6. Organizations that believe they have leadership capabilities in place: 2018 versus 2020



Percentage of organizations believing they have the required leadership capabilities

Source: Capgemini Research Institute, Digital Mastery Survey, April–May 2018, N=1,338 respondents, 757 organizations; Digital Maturity Survey, May–June 2020, N=1,000 respondents.

- **Technology and business have progressed the most.** Since 2018, technology and business have witnessed a 32 percentage point increase in the share of organizations saying they have these capabilities:
 - 72% of organizations say they have adopted agile methodologies for working cross-functionally within business and IT teams, up from 34% in 2018.
 - 65% of organizations say they have developed new ways of working between business and IT, up from 34% in 2018.
 - 65% of organizations say they have a stated security policy and the appropriate infrastructure to protect against security threats, up from 34% in 2018.

With increasing cybersecurity threats and attention to privacy considerations, organizations have made vast improvements in their technology and business capabilities. Spending on security-related hardware, software, and services will reach \$151 billion in 2023 with 9.4% annual growth over the 2019-2023 period.¹⁷ With multiple data protection regulations (e.g., the GDPR) being enforced around the world, there is a renewed push among organizations to further bolster cybersecurity. Our GDPR research found that 36% of organizations invested more than \$1 million in technology upgrades in 2019 keeping data privacy laws in mind.¹⁸ These data protection regulations have put further emphasis on safeguarding consumer data, particularly for retail organizations, which is the sector that leads in technology and business improvement (81% of retailers say they have the required capabilities in technology and business, compared to only 31% in 2018). "I think we (as retailers) have a decent-sized target on our backs," says Tyson Martin, chief information security officer at the Orvis Company, an American retail and mail-order business. He adds: "It's about access and visibility. And – coupled with the collection, storage, and processing of our customer data – this *is a large risk and our biggest vulnerability.*⁷¹⁹ Investments in technology upgrades is likely to be even higher in 2020, with the COVID-19 pandemic and the mass movement to remote working and distributed teams creating new requirements for security and privacy protocols.

In addition, organizations have also sped up their deployment by scaling agile. A recent survey of global software development executives found that 95% of organizations practice agile to some degree; 43% say their momentum for agile adoption has increased in the first quarter of 2020.²⁰ The need to be more responsive to customers is driving agile ways of working in retail. *"The speed of change in the market and consumer base is so fast that we need to get a lot more responsive to our customer's requirements,"* explains Swapnadeep Bhattacharya, group director of strategy at Metro AG, a German retailer. *"The need for cross-functional teams is critical to solve customer problems. This is a paradigm shift specially in the case of traditional retailers."²¹*

66%

Percentage of organizations in 2020 that say they have the required leadership capabilities in technology and business

Digital masters are widening their gap

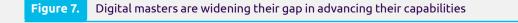
Based on our digital transformation framework described earlier in our report (see Figure 1. The building blocks of digital transformation), we can categorize organizations according to their relative digital mastery. In this report, two major cohorts emerge:

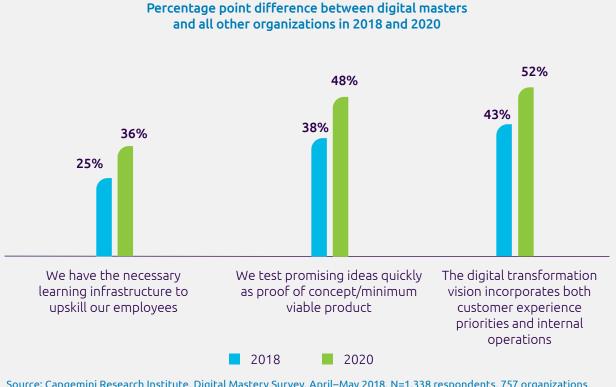
- Digital masters organizations with high relative mastery of both digital and leadership capabilities
- The rest organizations at lower levels of maturity in digital and/or leadership capabilities.

What sets digital masters apart?

Our research found that there is a widening gap among digital masters. While all organizations are doing better in their digital transformation journeys in 2020, digital masters are increasing the distance between themselves and their competitors and peers.

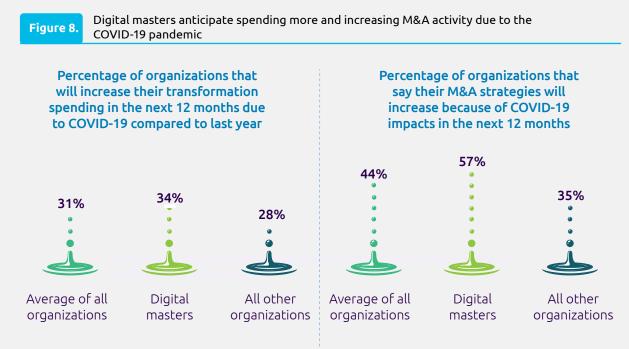
As shown in Figure 7, for example, in 2018, there was a 38 percentage point difference between digital masters and all other organizations who say they are testing ideas quickly as proof of concept or minimum viable product (65% of digital masters versus 27% of all others). This gap rose to 48% in 2020 (91% of digital masters versus 43% of all others).





Source: Capgemini Research Institute, Digital Mastery Survey, April–May 2018, N=1,338 respondents, 757 organizations, 244 digital masters, 513 all other organizations; Digital Maturity Survey, May–June 2020, N=1,000 respondent overall, 437 digital masters, 563 all other organizations.

This widening gap will persist given that digital masters are planning to accelerate further in the next 12 months due to the pandemic. Over one-third (34%) of digital masters plan to increase their transformation spending in the next 12 months because of COVID-19, compared to 28% of all other organizations. Further, 57% of digital masters say they will increase their M&A strategies versus 35% of all other organizations (see Figure 18).



Source: Capgemini Research Institute, Digital Maturity Survey, May–June 2020, N=1,000 respondent overall, 437 digital masters, 563 all other organizations.

34%

Percentage of digital masters that will increase their transformation spending in the next 12 months

Talent and culture initiatives take precedence

Our 2018 research revealed that the people dimension – which encompasses related capabilities across both digital and leadership – was a significant barrier to digital transformation progress. We found that leadership teams were failing to get their employees to collaborate and to actively involve them in the digital transformation journey. They also failed to invest in people analytics and employee skill development. In 2020, the good news is that organizations have made strong progress on this front.

More organizations make employees partners in the transformation today

In 2018, we found that organizations were not bringing their employees along in their transformation journeys. Many more organizations today involve employees in their digital initiatives – 63% in 2020, up from 36% in 2018. By sector, telecom leads the share of companies saying there are opportunities for everyone to be involved (79%) whereas consumer products lag behind (41%).

More organizations are paying attention to culture

Figure 9.

Most organizations promote a digital culture

Our research has consistently found that culture is a top barrier to successful digital transformation, with organizations, for example, not having a culture where new ideas and experimentation are prized. Culture is the result of how a company works and operates. It is composed of the collective experiences of employees and leadership; what they believe in and what they value. We define digital culture based on set of seven key attributes: agility and flexibility, collaboration, customer centricity, data-driven decision making, digital-first mindset, innovation, and open culture.²²

The progress organizations have shown over the past two years is encouraging, suggesting more organizations are paying attention to the importance of culture. Moreover, top leadership plays a central part in terms of role-modelling desired behaviors and mindsets. A director of product management at a US-based retailer says, "If a company has a truly agile board – not in the technology sense but in the verb sense – then they're also seeing the signs that digital is critical and they're going to be supportive of investments in digital transformation. I think the danger lies in the taxonomy of the words – digital transformation – in name only will do you no good. It's really cultural. As a CEO and CIO on a board, you have to be signed up for what it means to transform digitally."²³

Sixty-seven percent of organizations today say they actively promote the exploration of new ideas and experimentation compared to only 35% in 2018 (see Figure 9).



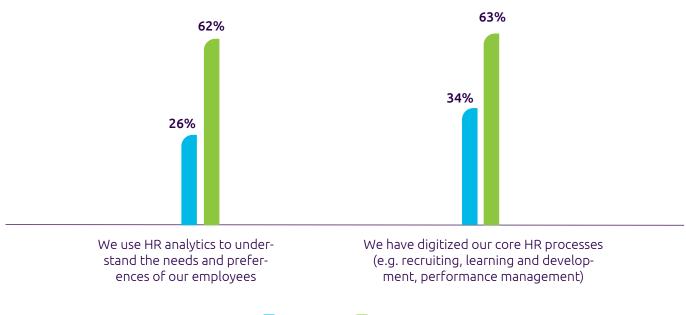
Percentage of organizations agreeing to the statements

Source: Capgemini Research Institute, Digital Mastery Survey, April–May 2018, N=1,338 respondents, 757 organizations; Digital Maturity Survey, May–June 2020, N=1,000 respondents.

Organizations have advanced their capabilities to manage talent

More organizations today leverage HR analytics to understand employee needs and preferences and many have digitized their core HR processes, such as recruiting and performance management (see Figure 10). Research conducted by LinkedIn found that nearly 80% of recruiters and hiring managers were at least "somewhat likely" to use data by 2020.²⁴ Companies are seeking HR professionals with data skills as the use of data to inform talent decisions is here to stay according to Dawn Klinghoffer, general manager of HR business insights at Microsoft. She says, "We are going to see the biggest change in the HR profession overall, as analytics start to reinvent the way we work. We are now starting to look for HR professionals that have the capability to understand, interpret, and leverage data – and this is a trend that I believe will continue for a while."²⁵

Figure 10. More organizations use analytics to understand employee preferences and have digitized HR processes



Percentage of organizations agreeing to the statement

2018 2020

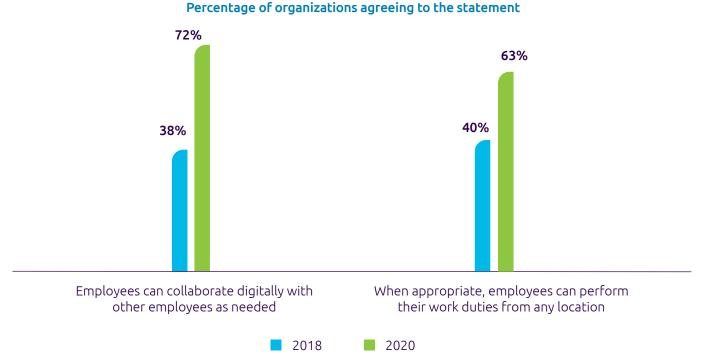
Source: Capgemini Research Institute, Digital Mastery Survey, April–May 2018, N=1,338 respondents, 757 organizations; Digital Maturity Survey, May–June 2020, N=1,000 respondents.

Effective management of talent includes equipping employees with the appropriate tools and technologies so they can do their work as well as providing flexible options. In 2020, 72% of companies say employees can collaborate digitally as needed, up from 38% in 2018. And 63% say their employees can perform their work from any location, compared to 40% in 2018 (see Figure 11).

The market for social software and collaboration tools in the workplace (e.g., employee communications platforms, meeting solutions) was estimated to double to \$4.8 billion by 2023.²⁶ Further, Slack, the business communication and collaboration platform, surpassed 12 million daily users in September 2019, up from six million in 2018.²⁷ The push to mass remote work during the COVID-19 pandemic has driven demand even further and its likely to continue to increase as distributed workforces become commonplace.

Understanding employee needs includes taking care of their mental and physical well-being. In a Gallup study, when asked to consider the impact of COVID-19, fewer than half of employees (45%) strongly agree that their organization cares about their overall well-being.²⁸ The increased use of technology to connect with employees and support their development and well-being, and to conduct workforce planning is expected to continue post-pandemic.²⁹





Source: Capgemini Research Institute, Digital Mastery Survey, April–May 2018, N=1,338 respondents, 757 organizations; Digital Maturity Survey, May–June 2020, N=1,000 respondents.

Upskilling employees witnessed limited improvement

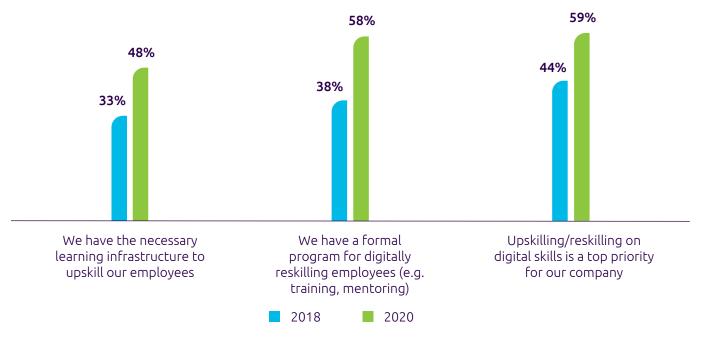
More organizations are focused on upskilling employees in 2020 than they were in 2018, but the increase has not been as significant as in other areas. For example:

- We see a 15 percentage point increase from 2018 in the number of organizations that say: (1) that they have the learning infrastructure to upskill employees; (2) that upskilling and reskilling on digital skills is a top priority for their company
- A 20% increase in organizations that say they have a formal program for digitally reskilling employees (see Figure 12).

72%

Percentage of organizations in 2020 that say employees can collaborate digitally with other employees

Figure 12. Fewer than 60% of organizations say that digital skills training is a top priority for their company



Percentage of organizations agreeing to the statement

Source: Capgemini Research Institute, Digital Mastery Survey, April–May 2018, N=1,338 respondents, 757 organizations; Digital Maturity Survey, May–June 2020, N=1,000 respondents.

In addition to this slower progress in skill building, we found in 2020:

- Fewer than half of organizations (48%) say they are investing in building soft skills such as emotional intelligence, adaptability, and collaboration.
- Telecom (53%), retail (52%), and banking (52%) lead all sectors with their investments in soft skills.

In-demand soft skills moved from being task-dependent in 2019 (e.g., task management, time management) to people-focused skills today (e.g., collaboration, adaptability, emotional intelligence).³⁰ Likewise, our emotional intelligence research revealed that EI is set to become a "must-have" skill in the next one to five years for all employees.³¹ And soft skills are not only important for leadership but critical for all employees. "We need people in our workplace who can connect with others, who display empathy and understanding, (and) who understand emotions. More than ever, emotional intelligence is not just a 'nice to have' but a core capability for the future," says Pip Russell, strategy, innovation, and commercial operations vice-president at Schneider Electric.³²

Organizations are not paying enough attention to sustainability transformation initiatives

As we discussed earlier in the report, we include purpose and sustainability in our 2020 definition of what digital mastery is today. Changing behaviors and values of consumers, governments, public-interest groups, investors, and employees around climate change and resource conservation are driving new ways of working among organizations. Sustainability is also critical for digital transformation today as we detail below.

What is sustainability and why it is important for

digital mastery? By sustainability, we mean environmental responsibilities (e.g., conservation of natural gas, reducing carbon and greenhouse emissions); social responsibilities

(e.g., safe working conditions, fair labor policy), and economic inclusiveness (e.g., fair trade; commitments to wider causes such as poverty reduction) in line with the United Nations definition of sustainable development.³³ While organizations must keep their eye on factors such as customer experience, operations, and business technology, they should also place emphasis on sustainability and their broader purpose, which has become important for customers and employees alike. The reasons why sustainability is integral to digital transformation and thereby to be a digital master are highlighted in Figure 13 and explained below.

Figure 13. The importance of sustainability for digital mastery today



Source: Capgemini Research Institute analysis.

- Shifting consumer behavior: Consumers are increasingly concerned about environmental footprint and climate change impact and want to make a difference with their actions. For instance, in our previous research we found that close to three-fourths of consumers are concerned about their environmental footprint and 66% of them choose to purchase products or services based on their "environmental friendliness." Likewise, 78% of consumers also agree that companies have a larger role to play in society beyond their self-interests (e.g., increasing revenue, expanding to other geographies).³⁴
- **Employee preferences:** People will also increasingly prefer to work for organizations that are creating positive environmental and social value. Eelco Smit, senior director sustainability at Philips says, *"Today's younger generation are looking for purpose in their jobs. As a company, we want talented employees to join us and today these talented people take conscious decisions about which company they want to work."³⁵*
- Funding and credit requirements: Increasingly, demonstrating progress against sustainability-based metrics such as ESG (environmental, social, and governance) is getting critical for access to capital markets which ensures that business is credible and backed by a purpose. As Larry Fink, chairman and CEO of BlackRock, said, *"We are committed by the end of 2020 to have all our portfolios integrated to ESG. For us climate risk is investment risk."* Likewise, sustainability also helps organizations to widen access to funding. Levi Strauss partnered with the International Finance Corporation (IFC) to provide lower interest rates for their vendors that practice sustainability initiatives.³⁶
- Digital technologies reinforcing sustainability: Increasingly, scaling digital technologies and the resulting digital transformation are also viewed from the sustainability lens on their extent of contribution to sustainability-backed objectives such as saving resources or reducing waste. For instance, vendors state that cloud services use fewer servers, consume lesser power, and reduce carbon emissions – which in turn scales digital agility and also contributes to sustainability.³⁷ Sustainability can also serve as testing grounds for new digital technologies. Therefore, it not only fulfills a company purpose to do good for society but can accelerate the shift to applying new digital technologies such as AI.
- Expectations from government: As more governments are beginning to take sustainability mainstream and setting targets, large organizations within the geographies are bound to be an integral part in achieving these goals. For instance, Europe's Green New Deal aims for the region to be climate neutral by 2050 and the government has stated that digital transformation is a key enabler to achieve its objectives³⁸

More reporting on sustainability: More than 80% of Fortune 500 companies are currently reporting on sustainability.³⁹ There are also reporting frameworks such as the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB) that are providing frameworks for organizations to report sustainability-based KPIs. This underscores the growing importance of transparent communication to varied stakeholders on sustainability initiatives and progress.

Our research reveals, however, that many organizations still lag in developing the necessary capabilities to fully prioritize sustainability investments.

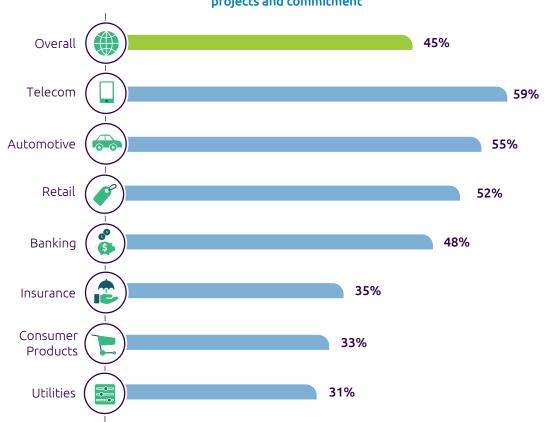
Accelerating sustainability investments is not a top priority

Our research shows that only 45% of organizations say they are accelerating sustainability investments, projects, and commitment. Telecom organizations (59%) lead all sectors, followed by automotive (55%) (see Figure 14). From our previous research, we found that consumers are putting increasing scrutiny on telecom operators' sustainability credentials and operators are also becoming aware of the critical importance of sustainability today:

- Over half of consumers (58%) see sustainability and socially responsible behavior as an important criterion in selecting their telecom operators.
- 45% of organizations in the telecom, media, and high-tech sectors view enhancing their sustainability efforts as their top priority in the next 6–12 months.^{40,41}

Sustainability has also been a top agenda item for the automotive sector for some time now. The head of sustainability at a large automotive OEM said, "We recently reaffirmed our focus on sustainability strategy at the corporate level into three key areas: climate action, circular economy, and ethical and responsible business. It's a long-term plan to go beyond ensuring sustainability in our operations and work with our supply chain network to make our entire value chain sustainable."⁴²





Percentage of organizations in 2020 accelerating sustainability investments, projects and commitment

Source: Capgemini Research Institute, Digital Maturity Survey, May–June 2020, N=1,000 respondents.

Consumer products, utilities, and insurance lag across many of the sustainability initiatives

When we further analyzed the initiatives undertaken across different sectors, a number of findings emerged:

- Tracking and optimizing wastewater is the most widely deployed initiative (64% overall) and green products the least deployed (50%).
- The consumer products, utilities, and insurance sectors lag the field in many of the initiative areas (see Figure 15).

Cost overruns, impact on margins, and prioritization of other issues and opportunities over sustainability can be some of the factors impacting the scaled deployment of sustainability initiatives. Ylenia Tommasato, brand sustainability and communication manager at Barilla Group, a global consumer product organization, says, "Internal challenges are the key issue that organizations face in deploying sustainability initiatives. For sustainability initiatives to thrive, you really need to have a singleminded approach from top-down or from bottom-up, and the entire organization needs to be aligned on the priorities."⁴³

This trend echoes research we conducted on sustainability in the energy and utilities sector, where we found that firms are failing to meet sustainability expectations because they struggle to execute initiatives at scale. For instance, only 6% of firms said they are on track to meet Paris climate agreement goals.⁴⁴ *"We all want energy that is reliable and affordable, but that is no longer enough. It must also be cleaner. To deliver that, trillions of dollars will need to be invested in replumbing and rewiring the world's energy system. This will require nothing short of reimagining energy as we know it. It will certainly be a challenge, but also a tremendous opportunity," says Bernard Looney, CEO of British Petroleum.⁴⁵*

Figure 15.

Sustainability initiatives across different sectors – Consumer products and energy and utilities lag behind across many of the initiatives

	Overall								
Tracking and optimizing water/wastewater in the value chain	64%	79%	6 74%	1 72%	68%	54%	7 51%	49%	
Reducing carbon footprint to meet or exceed international standards/Goals	59%	75%	72%	1 67%	\$ 58%	55%	E 44%	43%	
Focusing on circular economy initiative(e.g., reduce, reuse, and recycling materials	59%	73%	72%	1 71%	67%	45%	44%	2 42%	
Reducing internal (travel by employees for internal/client meet purposes)	55%	75%	64%	1 60%	3 59%	48%	43%	E 38%	
Focusing on green products(e.g., electric vehicles, shared- mobility, autonomous vehicles	50%	66%	63%	54%	48%	42%	40%	29%	
		0° (5)			Ê				
Retail Automotive		Banking	Telecom		Insurance	Utilities	s Cor	Consumer Products	

Source: Capgemini Research Institute, Digital Maturity Survey, May–June 2020, N=1,000 respondents.

Investing in emerging technologies to combat climate change needs more attention

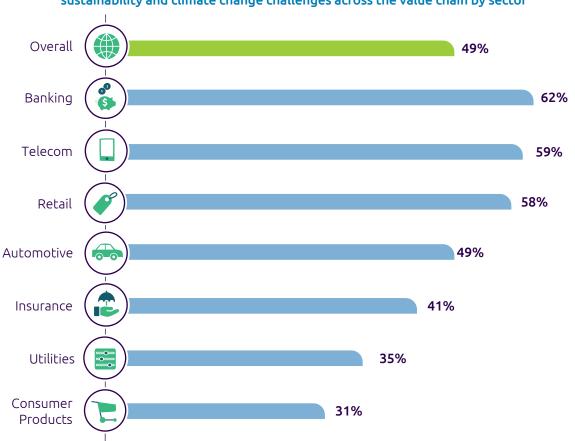
Fewer than half of organizations (49%) say they are investing in emerging technologies (e.g., AI, blockchain) to tackle sustainability and climate change challenges. We found that:

- Utilities and consumer products lag in terms of these investments. In the utilities sector in particular, previous research we conducted found that fewer than one in five organizations have partially or fully scaled technology use cases for sustainability.⁴⁶ In addition, our research on sustainability in consumer products found that nearly half of the organizations have started to deploy sustainability initiatives; however, fewer than a quarter had achieved scale.⁴⁷
- Banking organizations lead all sectors in investing in emerging technologies (62%), followed by telecom and

retail (see Figure 16). For example, telecom player Verizon aims for carbon neutrality by 2023 by increasing the energy efficiency of large wireless data centers. Verizon also launched green bonds focused on sustainability in 2019 to deploy 5G wireless technologies and for legacy network replacements.^{48,49} In retail as well, there are interesting use cases of technologies such as AI, 3D-printing, and AR/VR to drive sustainability. For example, Alibaba uses AI-based routing algorithms to reduce travel distance for their logistics by 30%.⁵⁰

Figure 16.

Banking, telecom, and retail lead all sectors in investing in emerging technologies to combat sustainability and climate challenges



Percentage of organizations in 2020 investing in emerging technologies to combat sustainability and climate change challenges across the value chain by sector

Source: Capgemini Research Institute, Digital Maturity Survey, May–June 2020, N=1,000 respondents.

49%

Percentage of organizations in 2020 that say they are investing in emerging technologies to combat climate change

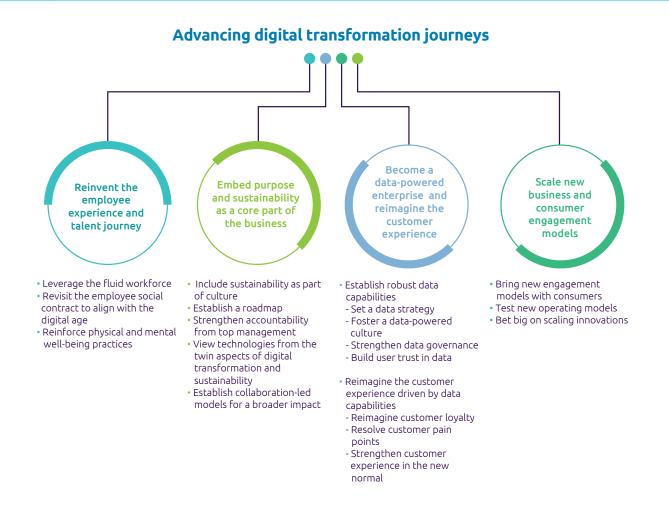
What can we learn from digital masters to advance digital transformation?

To gain a better understanding of best practices for what digital mastery looks like today, we analyzed the actions of the digital masters – the cohort of high-performing organizations in our survey – that excel on both digital and leadership capabilities. We defined digital masters based on their responses to the questions that were asked in both the 2018 and 2020 surveys. By analyzing factors where digital masters pay special attention and excel, we offer the four recommendations detailed in Figure 17.

To showcase digital masters' practices, this section of the report only includes questions that were newly introduced in

2020. In other words, we wanted to be careful to not use the same questions to classify digital masters and to explain their practices. As mentioned earlier in the report, we updated our digital transformation framework to include components related to purpose and sustainability. In addition, data has never been more important than it is now, as the uncertainty unleashed by the COVID-19 pandemic has heightened the need for forward-looking, real-time insights and scenario modelling. We include recommendations in these areas given their increasing importance to digital transformation today.

Figure 17. Four recommendations to advance digital transformation journeys



Source: Capgemini Research Institute analysis.

Reinvent the employee experience and talent journey

Leverage the fluid workforce

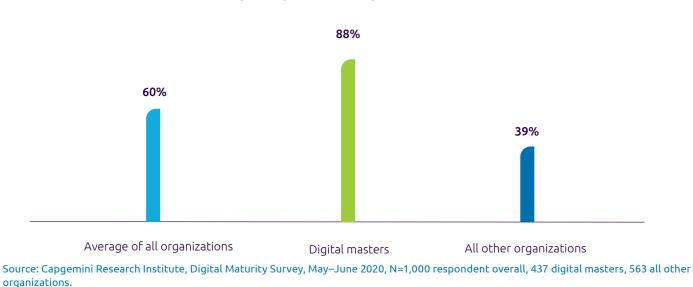
Digital masters embrace the use of the fluid workforce, which is defined as independent workers, freelancers, gig, and crowdsourced workers. Our previous research found that the fluid workforce is becoming increasingly important as rapid digital transformation and a volatile business environment have brought a change in the way organizations view talent. This new view of talent has agility, adaptability, and flexibility at its core, as well as a renewed balance between virtual and on-premises work.⁵¹

The vast majority (88%) of digital masters say they are integrating the fluid workforce in their organization versus only 39% of all other organizations (see Figure 18). Ley Wilson, a supplier and vendor management lead at Travelex, sees tremendous value in leveraging the fluid workforce. He says, "A fluid workforce allows companies to open up the book to a broad spectrum of talent than just what's on their doorstep. This system allows companies to bring in people just for the short term. These are people who can help us change direction or produce new projects. And, while they are here, they can capture and transfer their learning and expertise to our full-time employees."⁴⁹ Hitachi, the Japanese electronics giant has set a goal to make working remotely a standard practice for 70% of their workforce from April 2021.⁵³

88%

Percentage of digital masters who use fluid workers

Figure 18. Digital masters are integrating the fluid workforce in their organization



Percentage of organizations using the fluid workforce

Revisit the employee social contract to align with the digital age

The employee-employer relationship has been evolving over decades. The evolution has accelerated in the recent past due to various reasons including the increased use of technology and the fluid workforce, rapidly evolving job responsibilities, and new ways of working. This change is further accelerated due to the COVID-19 pandemic and the move to mass remove work – temporarily and permanently for an increasing number of organizations. In our previous research on the fluid workforce, almost three-fifths (57%) of organizations surveyed will be using more fluid workers in mid-to-high skilled roles in the next 12 months.⁵⁴

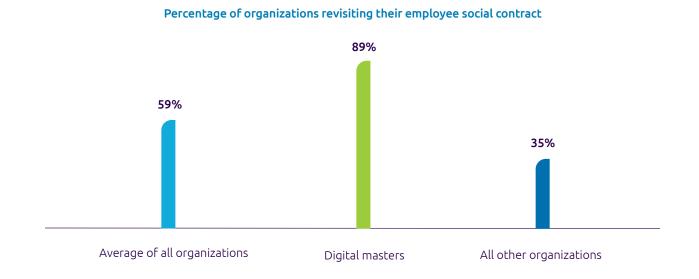
As a result, employee expectations and responsibilities have undergone a change too. For instance, most countries mandate a basic employer-funded health coverage for employees. With organizations moving to a higher share of gig and fluid workers, they will have to rethink how they cover their employees' health benefits accessible and affordable. Laura Goodrich, workforce transformation expert and thought leader, explains, *"I think we will see insurance companies putting together packages that are very much designed for the freelance community in a much more favorable way. And, I imagine that*

governments will also step in to fill those gaps that exist."55

Another example comes in the form of continuous upskilling. With the rapidly evolving job roles and responsibilities in the digital age, organizations must make upskilling and reskilling an integral part of a modified social contract where organizations play the role of lifelong partner in employees learning and development.

Organizations must revisit their social contract to assess the factors that appeal the most to their employees. For example, replacing more traditional growth options with flexible horizontal tracks, integrating learning and development opportunities, and being more transparent about career development will lead to a work culture more aligned with the digital age. Digital masters in our survey are focused on redefining their relationship with employees. The vast majority (89%) of digital masters say they are revisiting their social contract – in ways such as examining the new employeremployee relationship and focusing on supporting employees in time of distress – versus 35% of all other organizations (see Figure 19).

Figure 19. Digital masters are rethinking their employee social contract



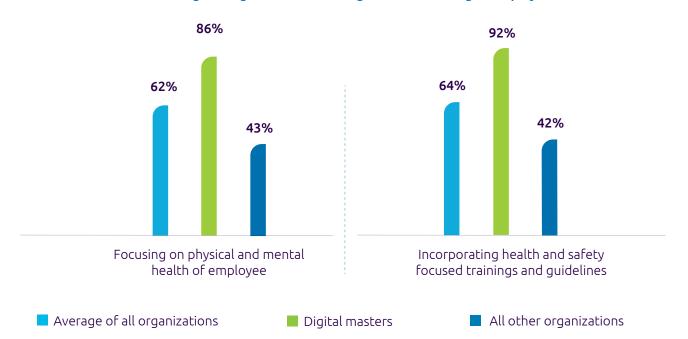
Source: Capgemini Research Institute, Digital Maturity Survey, May–June 2020, N=1,000 respondent overall, 437 digital masters, 563 all other organizations.

Reinforce physical and mental well-being practices

The definition of workplace wellbeing has evolved to include a multi-faceted view of working life. This includes how employees feel about their work, the working environment and the quality and safety of the physical environment where they work. Taking a broader look at employee well-being, both from a physical and mental perspective, offers dividends in more satisfied employees and improved productivity. Depression and anxiety cost the global economy \$1 trillion per year in lost productivity.⁵⁶ Organizations need to take a more holistic view of their employee mental and physical health practices:

- 87% of digital masters say they are focusing on the physical and mental health of employees versus 43% of all other organizations.
- 92% of digital masters say they are incorporating health and safety focused trainings and guidelines, compared to 42% of all other organizations (see Figure 20).

Figure 20. Digital masters are focusing on the physical and mental health of employees



Percentage of organizations focusing on the well-being of employees

One way that organizations can support employee mental well-being is through training on critical soft skills. As routine

tasks are automated and humans move to tasks that cannot

be automated, soft skills such as emotional intelligence can

help adapt with change more comfortably. Howard Davies,

workforce is likely to build better relationships with customers,

products and services. I think when you have high emotional

the workforce alike."54

intelligence, you tend to be more honest and authentic. These

qualities have far-reaching, positive impacts on the business and

either directly in their interactions or through the design of new

chief operations officer and program director, Freeformers, a

future of work consultancy, said, *"A more emotionally intelligent*

Source: Capgemini Research Institute, Digital Maturity Survey, May–June 2020, N=1,000 respondent overall, 437 digital masters, 563 all other organizations.

Embed purpose and sustainability as a core part of the business

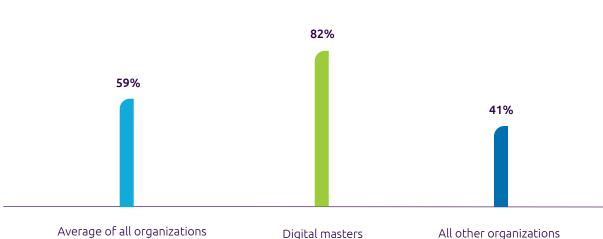
As we highlighted earlier, sustainability is a critical component to digital transformation today. Our research shows that 82% of digital masters say they are making social and economic responsibility a core part of their purpose versus 41% of all other organizations (see Figure 21). Embedding sustainability in the broader purpose is even more important as consumers prioritize purchasing from firms that lead with a purpose.



Percentage of digital masters who focus on social and economic purpose

Figure 21.

82% of digital master are focused on purpose



Percentage of organizations focusing on purpose – social and economic responsibility

Source: Capgemini Research Institute, Digital Maturity Survey, May–June 2020, N=1,000 respondent overall, 437 digital masters, 563 all other organizations.

How organizations can do this includes:

- Include sustainability as part of the culture: This will not only help to attract new talent but also to retain current talent as consumers and employees increasingly view sustainability a critical decision factor in the companies they want to purchase from, and the companies they want to work for. Proctor and Gamble, the American consumer goods company, as part of their Ambition 2030 goals plan to engage, equip and reward employees building sustainable thinking and practices at workplace.⁵⁷
- Establish a roadmap: Establish a roadmap to sustainability across the value chain. This includes aligning KPIs with established frameworks like the UN's sustainability development goals (SDGs), establishing governance

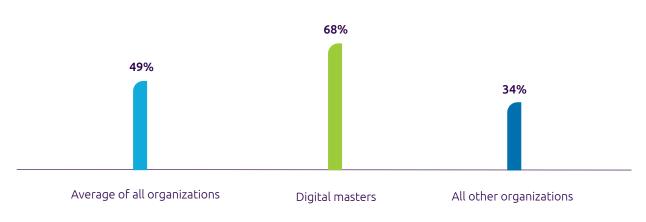
framework and measuring progress. BMW, the Germany auto manufacturer, for instance has created a detailed 10-year sustainability plan with interim goals for the timeframe up to 2030.⁵⁸

 Strengthen accountability from top management: Establishing direct oversight and accountability from the top management is critical to drive scaling up of sustainability initiatives. BNP Paribas, the French banking group for instance, links a part of their top management's variable compensation to the progress made against sustainability initiatives.⁵⁹ • View technologies from the twin aspects of digital transformation and sustainability: Our research shows that two-thirds (68%) of digital masters say they are investing in emerging technologies such as AI and blockchain to combat sustainability and climate change challenges across the value chain, compared to 34% of all other organizations (see Figure 22). Exxon Mobil is piloting scalable technologies to reduce methane emissions

across 1,000 sites in North America.⁶⁰ At the same time, while technologies like AI offers immense opportunities for transformation, it is important for organizations to view technologies from the twin aspects of both digital transformation and impact on sustainability. For instance, Iceland witnessed high increase in energy usage from data centers on account of bitcoin mining.⁶¹

Figure 22. 68% of digital master are investing in emerging technologies to combat sustainability and climate change challenges





Source: Capgemini Research Institute, Digital Maturity Survey, May–June 2020, N=1,000 respondent overall, 441 digital masters, 539 all other organizations.

• Establish collaboration-led models for a broader

impact: Sustainability-led collaboration with the broader peer network can help to arrive at common frameworks to identify solutions, measure progress, and create a broader impact. The banking industry serves as a leading example in this front. A group of 130 banks representing about one-third of the global banking sector have signed up for "Responsible Banking," an initiative between the financial sector and the United Nations (UN) to align business operations with sustainable development goals.⁶²

Become a data-powered enterprise and reimagine the customer experience

Given the rapid pace of change in technology, the hypercompetitive business environment, and increasing

customer expectations, organizations today need to adapt and reinvent quickly to deal with uncertainty.

Data is a prerequisite for digital transformation. In this unforgiving environment, harnessing and applying data and analytics is a critical enabler for digital transformation success and innovation. In our research on data-powered enterprises, we found that 50% of organizations say decision making in their organization is completely data driven.⁶³ US-based Best Buy's CEO Hubert Joly agrees that data has been a critical enabler for their digital transformation and emphasizes aligning the entire organization around data to bring in the change. He says, "Data has been a key element of transformation from day one, applied to every one of processes, starting with customer journeys and digitization of those journeys. These go across multiple touchpoints, from website and their personalization, to using AI and machine learning in customer searches. We have built a huge customer database, with 12,000 attributes for single customer identity which brings a huae foundation." 64

Establish robust data capabilities

To become data-powered, organizations must establish robust data capabilities. Our research on data-powered enterprises shows that data masters achieved a 22% reduction in customer churn, which is 87% more than what other organizations realized (12%).⁶⁵ Critical pillars for data capabilities include:

- Set a data strategy: By defining a data strategy, organizations can ensure a common and aligned approach across key priorities which includes data access (getting the data); data usage (embedding data across business processes); and data activation (driving value and insights from the data). A data strategy also ensures a unified approach and understanding across the business and IT functions and helps to map data to business goals. Vijay Balakrishnan, chief group data officer at Michelin says, "Organizations need to craft the data strategy jointly with various business units. These business units can be at different maturity levels. Some might not have a data strategy; some may have a few BI reporting activities going on; some might be advanced with using AI. So, you need to work with them and define a data strategy that is aligned with the overall business strategy."⁶⁶ In addition, organizations should ensure an integrated end-to-end data platform across data collection to analytics so they can respond quickly to new challenges and build new data capabilities.
- Foster a data-powered culture: Organizations need to embed data-powered decision making into business functions to create a data-powered culture and encourage new ways of working. Our recent research on data -powered enterprise shows that 75% of data masters invest in a collaborative and innovation driven data-culture.⁶⁷ Employees should also feel empowered to access data and the related algorithms at any time they need. BMW, for instance, plans to train up to 5,000 employees on AWS technologies to make better use of data. Kai Demtroder, vice president of data transformation at BMW points to fostering a data-powered culture. He says, "We want to switch from gut-driven decisions to data-driven decisions. We have a few hundred data scientists at BMW, but the aim *is to make the data accessible to everyone.*⁷⁶⁸ A data-first mentality is also important to fostering this culture. For instance, telecom player Sprint's digital transformation included transitioning to a data-driven website powered by a comprehensive view of consumers tracked across multiple channels. Sprint's chief digital officer Rob Roy says, "We are seeing a lot of benefit from taking that data-first mentality and focusing our technology build around that type of environment."

- Strengthen data governance: In our recent research on data-powered enterprises, the data masters we surveyed have one thing in common 95% of them have a chief data officer (CDO), either as a standalone role (87%) or as an additional responsibility (8%). And 77% of data masters believe that the CDO has been instrumental in realizing their data vision.⁷⁰ A chief data officer should uphold the data governance and steer the operationalization of the data strategy. A CDO's role, largely oversees varied data-related functions including advising and creating data governance; data management; ensuring data quality; data analytics and business intelligence; ensuring that privacy protections are in place; and working with HR to nurture the skillsets required to make the organization data powered.
- Build user trust in data: In the journey towards digital transformation, organizations should build consumer trust. To measure the extent of trust, organizations should also use trust-related KPIs like the number of users willing to share data with them or the level of customer satisfaction. For instance, BMW and Daimler, in their ride hailing and car sharing services partnership said trustworthy handling of users' data will be a key competitive advantage for their joint venture.⁷¹ Apart from consumer trust, it is essential to build business executive trust on the data they use. Data trust is key to organizational agility, crossfunctional collaboration, and generating value. In fact, our research on data-powered enterprise research, shows that organizations where business executives trust data are better able to monetize data.⁷²

95%

Percentage of data masters who have a chief data officer

Reimagine the customer experience driven by data capabilities

Data-driven decision making is also critical for organizations to strengthen and reimagine customer engagement. Companies such as Google, Alibaba, and Amazon use data-driven platforms to identify trends and ideas for new solutions and offerings for their customers.⁷³ Coca-Cola used data collected at its self-service drink fountains to create a new permanent addition to its lineup – Cherry Sprite.⁷⁴ Some of the other ways through which data can enhance the customer experience include:

- **Reimagine customer loyalty:** Data can become a strategic asset in enhancing customer loyalty. For example, Lloyds and Santander's retail banking customers can get special offers from a range of retailers. The banks' digital loyalty schemes use spending data to give targeted discounts to customers at the retailers they visit. The consumer insights collected further help the retailers to customize their offers.⁷⁵
- **Resolve customer pain points:** Data-driven patterns and insights can help organizations find solutions for customer issues. For example, voice and chat interfaces can be trained on the data to understand the pattern of customer complaints and provide quick resolutions. Royal Bank of Scotland, with the help of real-time data analytics, tracks customer complaints and also predicts new questions or complaints they may have.⁷⁶

organizations.

• Strengthen customer experience in the "new normal": Consumer appetite for touchless interactions like digital payments increased during the COVID-19 pandemic and many have become an integral part of the customer experience. Organization's vast troves of data can help them to reimagine products and services as suited to the contactless "new normal." For example, India-based ICICI bank offered banking services like balance checks, credit limits, and credit details to customers via WhatsApp during the pandemic.⁷⁷

Scale new business and consumer engagement models

Organizations across sectors are constantly thinking of new ways to reinvent the customer experience, meet customer preferences, and improve operational efficiency at the same time. The COVID-19 pandemic has especially cemented transformation at the heart of business operations and strengthened the change drivers. Our research shows that 61% of all organizations say they are exploring new locations and markets to enter and this increases to 90% for digital masters. Likewise, 69% of all organizations say they go beyond the traditional sector and for opportunities to expand to other sectors which grows to 94% for digital masters (see Figure 23).

Figure 23. Digital masters are strengthening focus on new business and operating models



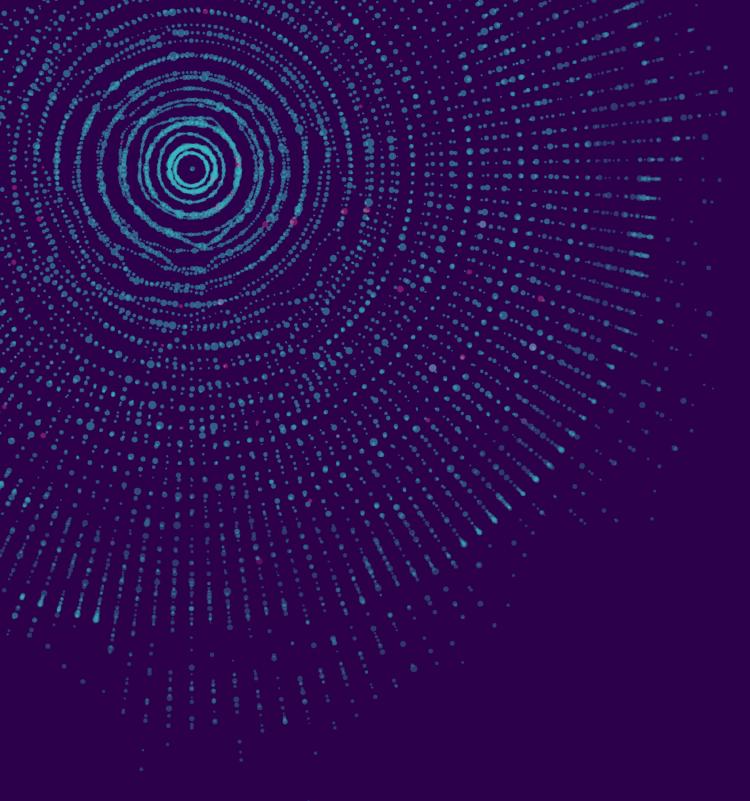
Percentage of organizations focusing on new business and operating models

31

90%

Percentage of digital masters who consider new locations and markets to enter

- Bring new engagement models to consumers: New engagement models help organizations to pivot, scale innovation, and bring about transformation. Data-driven decision making as we detailed previously is critical as organizations adapt to changes quickly and pivot to new customer experience models. Some of the examples in this regard include:
 - Consumer product organizations stepping up their directto-consumer capabilities as consumer preference for online shopping accelerates. This also brings new ways of fulfillment and last mile delivery models.
 - Likewise, consumers are increasingly comfortable in using technologies such as AI enabled interactions – voice interface, chat interface when engaging with organizations. As a result, organizations can step up their game in leveraging different technologies across the consumer engagement journey.
 - In the same way, touchless interfaces such as contactless payments, self-checkouts, use of technologies such as AR/VR are gaining more prominence currently as consumers find it to be safe and convenient to complete their shopping journey especially during the pandemic.
- Test new business models: Many organizations continue to examine new business models to help them pivot transformations across their value chain. Home Depot, Nike, and Best Buy are some of the organizations that has embraced digital transformations in marketing, customer engagement and fulfillment.⁷⁸ Likewise, P&G, Walgreens, Nestle collaborated with a firm called Loop to bring in a new business model based on recyclable packaging.⁷⁹
- Bet big on scaling innovations: In this context, it is critical that organizations bet big on innovations. Eightyeight percent of digital masters say they are scaling innovation outside of IT, compared to only 40% of all other organizations. Achieving scale is often cited as a top barrier to realizing commercial goals across any industry.⁸⁰ While investment in innovation structures and building partnerships with the eternal ecosystem is important, organizations must make scaling a key part of the innovation journey given its own set of challenges, and mindset and skill requirements. John Bessant, professor and chair in innovation and entrepreneurship at the University of Exeter emphasizes the need to acknowledge the different skill sets within innovation and to also move people around temporarily. "Companies need to find ways to bridge the innate resistance stemming from the gap between the teams doing exciting stuff in the lab and the 'rest of us'," he explains. "One of the best ways is to move people around. For example, second people into the front-end innovation team, or plant innovators inside the product or business lines to explore the scaling question when a pilot or prototype is ready."⁸¹

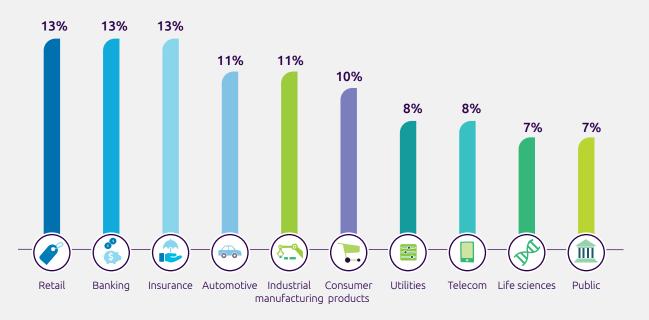


Conclusion

Two years on from our previous research where we found that many organizations had not kept pace on building the necessary digital and leadership capabilities, the progress since is striking. Organizations have made advancements on their digital transformation journeys since 2018, progressing along both the digital and leadership dimensions. The continued rapid pace of technology innovation and business model disruption over the past two years – and exacerbated by the COVID-19 pandemic being a major catalyst of change – has driven these advancements. While organizations have progressed on a wide variety of measures across diverse areas such as customer experience, operations, business and technology, many organizations are still challenged on incorporating sustainability and purpose into their strategies. By reinventing the employee experience and talent journey, embedding purpose and sustainability into the business, becoming a data-powered enterprise and reimagining the customer experience, and scaling new business and engagement models, organizations can remain competitive and move to the next phase of their digital journeys.

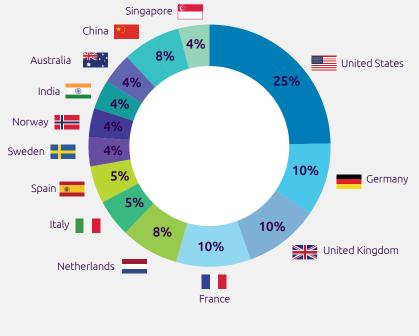
Research Methodology

In May and June 2020, we surveyed 1,000 executives from organizations with at least \$1 billion in revenue across sectors to gauge their views on the maturity of their organization's digital and leadership capabilities required for digital transformation. Twenty percent of the organizations reported revenue of more than \$20 billion in FY 2019. The characteristics of the 2020 survey population are largely consistent with the 2018 sample.



Executives by industry of organization









Source: Capgemini Research Institute, Digital Maturity Survey, May–June 2020, N=1,000 respondents.

References

- 1. Capgemini Consulting and the MIT Center for Digital Business, "The digital advantage: How digital leaders outperform their peers in every industry," 2012.
- 2. Capgemini Research Institute, "Understanding digital mastery today: Why companies are struggling with their digital transformations," July 2018.
- 3. World Economic Forum, "Here's how digital transformation will create a more sustainable world," January 2020.
- 4. Capgemini Research Institute, "Fast-forward to the future: Defining and winning in the post-COVID new normal," July 2020.
- 5. Dell Technologies, "Digital Transformation Index 2020," August 2020.
- 6. Microsoft. "2 years of digital transformation in 2 months." April 2020.
- 7. The International Data Corporation (IDC), "New IDC spending guide shoes continued growth for digital transformation in 2020, despite the challenges presented by the COVID-19 pandemic," May 2020.
- 8. Forbes, "Enterprises increased AI spending by 62% last year," March 2020.
- 9. Capgemini Research Institute interview.
- 10. MIT Sloan Management Review, "The new elements of digital transformation," November 2020.
- 11. Business Wire, "StarHub partners with Matrixx software to build giga," March 2020.
- 12. Capgemini Research Institute, "The art of customer-centric artificial intelligence," July 2020.
- 13. MarketsandMarkets, "IoT in Manufacturing Market by Solution (Network Management, Data Management, Device Management, Application Management, Smart Surveillance), Platform, Service (Professional and Managed), Application, Vertical Market, and Region – Global Forecast to 2022," August 2019.
- 14. IDC, "Worldwide Public Cloud Services Spending Will More Than Double by 2023, According to IDC," July 2019.
- 15. Mitsui & Co., "Wave of reorganization shaking up autonomous driving industry," August 2020.
- 16. Capgemini Research Institute interview.
- 17. IDC, "New IDC Spending Guide Sees Solid Growth Ahead for Security Products and Services," October 2019.
- 18. Capgemini Research Institute, "Championing Data Protection and Privacy," September 2019.
- 19. Capgemini Research Institute, "Cybersecurity The new source of competitive advantage for retailers," May 2018.
- 20. Digital.ai, "14th Annual State of Agile Report," May 2020.
- 21. Capgemini Research Institute interview.
- 22. Capgemini Research Institute, "The Digital Culture Challenge: Closing the employee-leadership gap," June 2017.
- 23. Capgemini Research Institute interview.
- 24. LinkedIn Talent Solutions, "Global Recruiting Trends 2018, The 4 Ideas Changing How You Hire," January 2018.
- 25. LinkedIn Talent Solutions, "Global Recruiting Trends 2018, The 4 Ideas Changing How You Hire," January 2018.
- 26. Gartner, "Gartner says worldwide social software and collaboration revenue to nearly double by 2023," September 2019.
- 27. Slack.com, "Not all daily users are created equal: Work is fueled by true engagement," October 2019.
- 28. Gallup Workplace, "COVID-19: What Employees Need From Leaders Right Now," March 2020.
- 29. Gartner, "Three trends in the Gartner hype circle for human capital management, 2020," November 2020.
- 30. LinkedIn Learning, "2020 Workplace Learning Report," February 2020.
- 31. Capgemini Research Institute, "Emotional Intelligence: the essential skillset for the age of AI," October 2019.
- 32. Perthnow, "Emotional intelligence is most in demand, but most workers lack it," July 2019.
- 33. United Nations, "The sustainable development agenda."
- 34. Capgemini Research Institute, "Consumer products and retail: How sustainability is fundamentally changing consumer preferences," June 2020.
- 35. Cappemini Research Institute, "Consumer products and retail: How sustainability is fundamentally changing consumer preferences," June 2020.
- 36. Just style, "Levi strauss teams with ifc on supply chain climate targets," June 2019.
- 37. Sustainability.aboutamazon.com, "Sustainability in the cloud."
- 38. EC. Europa. EU, "European Green Deal communication," December 2019.
- 39. Equinix, "Digital transformation is making the world more sustainable," February 2020.
- 40. Capgemini Research Institute, "COVID-19 and the connected consumer," September 2020.
- Capgemini Research Institute, "Fast-Forward to the Future: Defining and winning the Post-COVID New Normal," July 2020.
 Capgemini Research Institute, "The Automotive industry in the era of sustainability," March 2020.
- 43. Capgemini Research Institute, "How sustainability is fundamentally changing consumer preferences," July 2020.
- 44. Capgemini Research Institute, "Why energy and utilities companies need to view sustainability as an opportunity," October 2020.
- 45. BP Website, "BP sets ambition for net zero by 2050, fundamentally changing organization to deliver," February 2020.
- 46. Capgemini Research Institute, "Why energy and utilities companies need to view sustainability as an opportunity," October 2020.
- 47. Capgemini Research Institute, "Consumer products and retail: How sustainability is fundamentally changing consumer preferences," June 2020.

- 48. Capgemini Research Institute, "Consumer products and retail: How sustainability is fundamentally changing consumer preferences," June 2020.
- 49. Environmental leader, "Verizon carbon neutrality," April 2019.
- 50. Beautifeye, "Reduction in Alibaba travel distances with AI route optimization," May 2019.
- 51. Capgemini Research Institute, "The fluid workforce: How a blended workforce strategy is key to success in the age of AI and automation," July 2020.
- 52. Capgemini Research Institute, "The fluid workforce: How a blended workforce strategy is key to success in the age of AI and automation," July 2020.
- 53. CNN World, "Hitachi plans to make working-from-home standard practice," June 2020.
- 54. Capgemini Research Institute, "The fluid workforce: How a blended workforce strategy is key to success in the age of AI and automation," July 2020.
- 55. Capgemini Research Institute, "The fluid workforce: How a blended workforce strategy is key to success in the age of AI and automation," July 2020.
- 56. World Health Organization (WHO) website, "Mental health in the workplace."
- 57. Businesswire, "P&G announces new environmental sustainability goals focused on enabling and inspiring positive impact in the world," April 2018.
- 58. Green car congress, "BMW Group makes sustainability and efficient resource management central to its strategic direction," July 2020.
- 59. Group.BNP Paribas, "Global 100 Most Sustainable Corporations": BNP Paribas, 1st European bank in terms of sustainable development," January 2019.
- 60. Economic Times, "ExxonMobil tests new technologies to slash methane emissions," April 2020.
- 61. BBC, "Bitcoin energy use in Iceland set to overtake homes says local firm," February 2018.
- 62. Devex, "One-third of world's banking industry pledges to align business with SDGs," September 2019.
- 63. Capgemini Research Institute, "The data-powered enterprise: Why organizations must strengthen data mastery" November 2020.
- 64. CMO, "How Best Buy shifted from being retail-led to customer relationship driven," March 2019.
- 65. Capgemini Research Institute, "The data-powered enterprise: Why organizations must strengthen data mastery," November 2020.
- 66. Capgemini Research Institute, "The data-powered enterprise: Why organizations must strengthen data mastery," November 2020.
- 67. Capgemini Research Institute, "The data-powered enterprise: Why organizations must strengthen data mastery," November 2020.
- 68. CIO.Economic Times, "BMW creates data hub with Amazon to boost efficiency," December 2020.
- 69. Data-Axle, "4 ways chief information officers can use data for digital information," August 2020.
- 70. Capgemini Research Institute, "The data-powered enterprise: Why organizations must strengthen data mastery" November 2020.
- 71. Seattle Time, "BMW Daimler launch car and ride sharing joint venture," February 2019.
- 72. Capgemini Research Institute, "The data-powered enterprise: Why organizations must strengthen data mastery" November 2020.
- 73. Valuer.ai, "Accelerating new growth with data-driven innovation."
- 74. AI Business, "Coca-Cola goes autonomous: how the soft drink giant is implementing AI," September 2017.
- 75. Reuters, "Dollars in the detail: banks pan for gold in data lakes," June 2019.
- 76. Forbes, "10 examples of predictive customer experience outcomes powered by AI," December 2018.
- 77. ICICI Bank, "About us, Annual reports, 2019-20, strategic focus areas for business," 2020.
- 78. Game learn, "7 examples of digital transformation in business."
- 79. Medium, "New ways of doing business during the new normal," July 2020.
- 80. Capgemini Research Institute, "What's the big idea? Why most innovations fail to scale and what to do about it," September 2020.
- 81. Capgemini Research Institute, "What's the big idea? Why most innovations fail to scale and what to do about it," September 2020.

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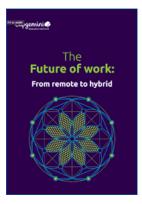
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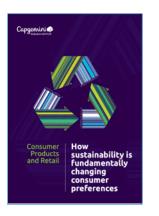
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