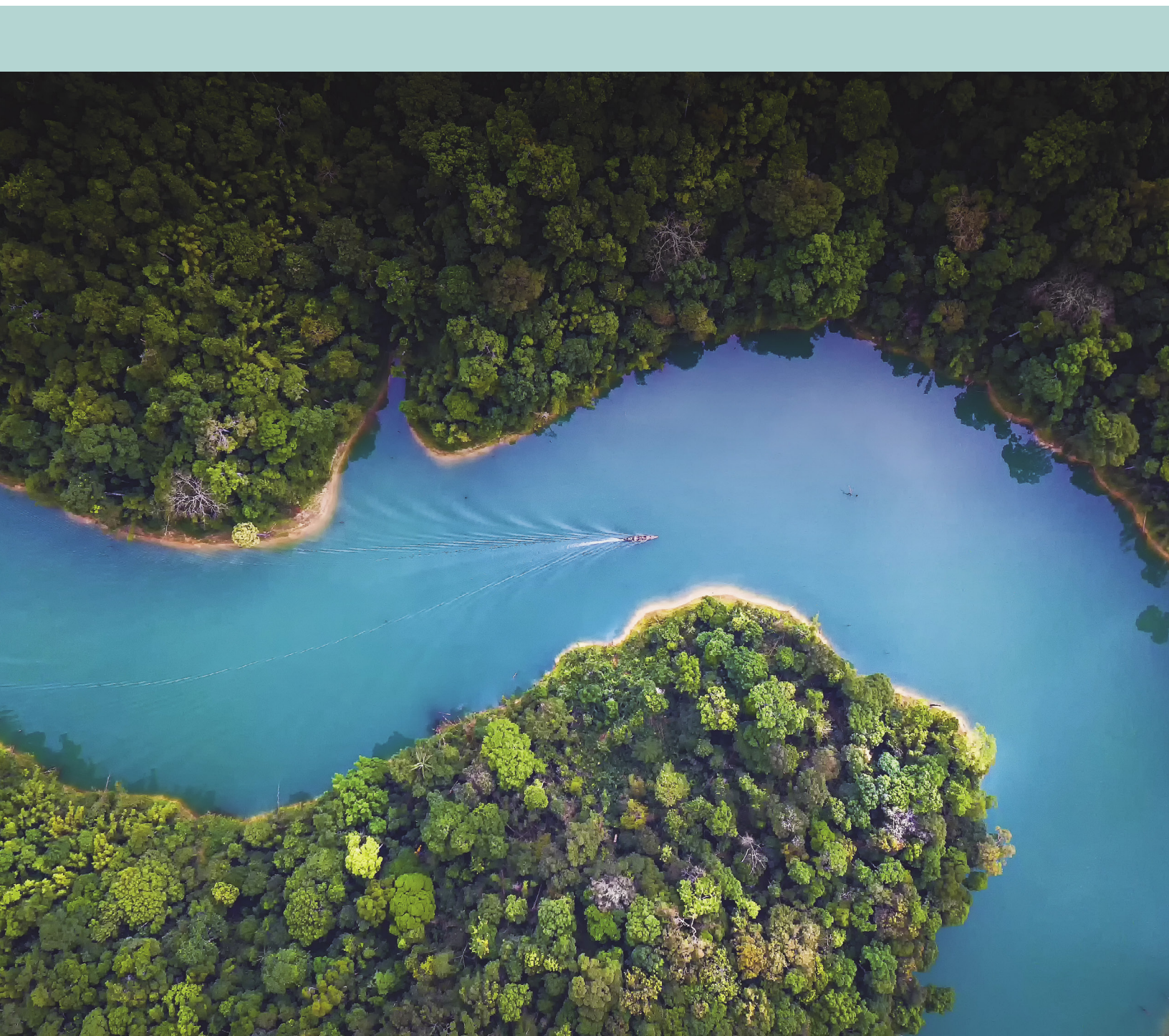


Building back with purpose

For a safe, equitable and connected future



About NTT

NTT believes in contributing to society through our business operations. We help people, clients and communities move confidently into the digital future and shape a better world. Our services include digital business consulting, technology and managed services for cybersecurity, applications, workplace, cloud, data center and networks. As a top 5 global technology and business solutions provider, our diverse team of over 300,000 people operates in 80+ countries and regions and delivers services to over 190 of them.

About WSJ Intelligence

WSJ Intelligence conducts bespoke and secondary research for brands and client brands of The Wall Street Journal | Barron's Group. Through rigorous analysis, WSJ Intelligence provides insights that are relevant, timely, and reliable.

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Introduction

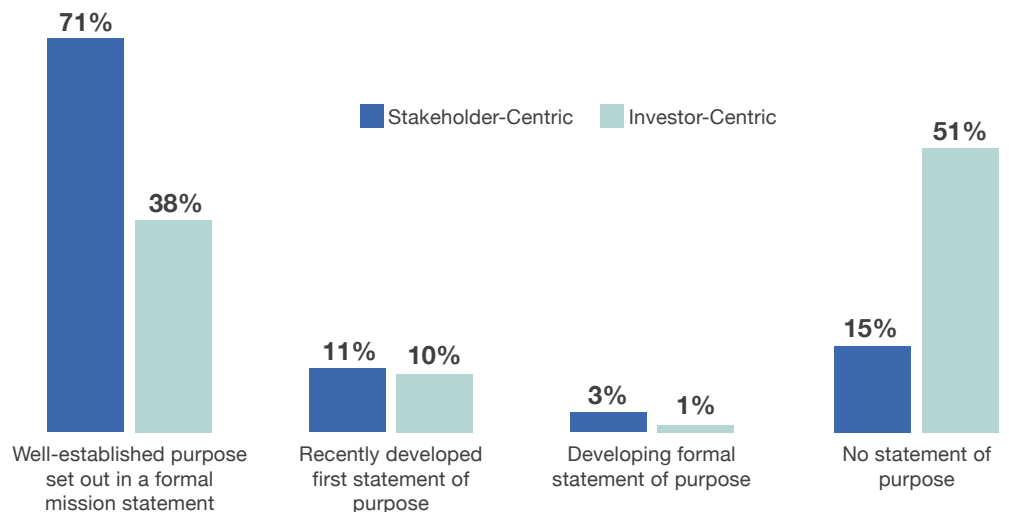
The Covid-19 pandemic crisis has dominated 2020 and its effects worldwide have been devastating—for individuals, for communities, for governments and economies, and for businesses of every kind. Technology has played a momentous role in the global response. It has been vital in supporting healthcare, in enabling businesses and governments to function remotely, and in keeping people connected through isolation and lockdown. Ultimately the crisis has accelerated the uptake of technology and digital transformation in numerous aspects of life, to an extent that could not have been predicted.

Many of these technological advances have changed our lives for the better, even as we struggle to control the ongoing pandemic and deal with its economic fallout and the new remote world it has created.

This speaks directly to the social-impact goals of many companies around the world, whether that is to safeguard the health and safety of employees, bring communities together, or improve access to vital services like health and education. Technology can play a central role in helping them to achieve all those things.

Figure 1.

Which of the following statements best describes the actions your organization has taken to define a strong and central “societal purpose” separate from shareholder returns?



Source: 2020 WSJ Intelligence and NTT global survey.

Against this backdrop, WSJ Intelligence surveyed 352 CEOs of large corporations in 15 countries worldwide, across 10 major industries. More than one-third of these report annual revenues of more than US\$5 billion, while about 60 percent report over \$1 billion. The CEOs surveyed were asked about the corporation's role in society, their social-impact strategies, the stakeholders involved, and how that strategy was affected by the pandemic. This survey also examined the CEOs' confidence in a range of new and emerging technologies and how those innovations might help the world to tackle some of the biggest social challenges.

Not surprisingly, the pandemic and issues related to it are top-of-mind and having a major impact on strategy. The majority of companies surveyed (70 percent) make up a stakeholder-centric group that has different practices and expectations compared with their shareholder-centric counterparts (**Figure 1**), while more than 60 percent have a broader purpose set out in a formal mission statement. Even these most investor-centric executives recognize the value of societal-impact programs. Such strategies are driven by an array of stakeholders and issues.

The survey shows that most corporations take their social-impact programs seriously, as demonstrated by their use of multiple instruments for promulgation and performance evaluation. While they are generally satisfied with their ability to use technology to support these programs, they see major opportunities in a range of technology-driven solutions, especially those focused on secure, high-performance communications, cloud computing, and advanced analytics.

Technologies that address the post-Covid-19 world include high-performance communications, cloud computing, and advanced analytics.

01.

The impact of Covid-19

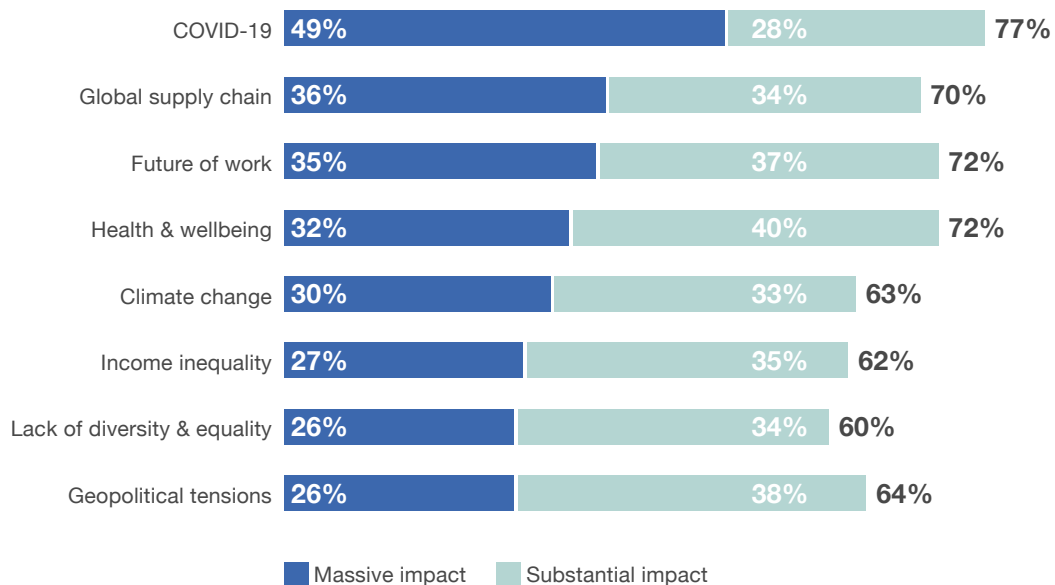
The current pandemic has forced changes in how we live, work and learn. Many of them have accelerated digital transformations that were already underway—and some have provided ways for companies to enhance their positive impact on society.

Covid-19 emerged in China in late 2019 and had spread to the U.S. and Europe by the end of January 2020. In March, the World Health Organization declared the outbreak a global pandemic. Across the world, countries closed borders and ordered their populations to stay at home, while businesses closed offices and factories. Workers in their millions worked from home and, where they could not, workplaces were forced to adopt social-distancing measures and other precautions. The impact was calamitous.

Unsurprisingly, half of the respondents said Covid-19 had a “massive” impact on corporate strategy, and 29 percent said the impact was “substantial.” The other factors cited as having a notable impact on strategy were also linked to the pandemic, directly or indirectly. The global supply chain, the future of work, and health and wellbeing are all considered more important than issues such as climate change, income inequality, geopolitical tensions, and lack of diversity and equality (**Figure 2**).

Top business strategy issues include global supply chains, the future of work, and health and wellbeing.

Figure 2.
What is the impact of the following societal issues on your corporate strategy?



Source: 2020 WSJ Intelligence and NTT global survey.

Technology has been at the center of every aspect of the Covid-19 response. Big Data analytics and artificial intelligence (AI) are helping us to understand the virus and develop vaccines. Cloud services, file sharing and online communication tools have allowed people to collaborate, even when physically isolated. Digital tools have been a lifeline for businesses, enabling schoolchildren to continue learning online, and bringing families and friends together for virtual socializing.

As digital transformation continues, and technology becomes more central to every aspect of life, so it becomes essential to keep systems secure. Cyberthreats are increasing. During the pandemic, fraudsters seized upon the disruption caused by the shift to homeworking, where the level of network security is often lower than in an office. Ransomware, where hackers gain access to computer systems and lock out the owner until a ransom is paid, was also prevalent during the pandemic. Hundreds of hospitals across the U.S. were targeted with ransomware even as they worked hard to save patients' lives.

Even as recently as a decade ago, life during such a pandemic would have looked radically different. In recent years, we have digitized society to connect people, communities and organizations, allowing aspects of everyday life to be delivered remotely. For many businesses, the pandemic response simply expedited their inevitable digital-transformation journey. This new remote world will continue to evolve, driving an increased need to connect and creating increased demand for technologies that can help us do that in a natural and effective manner. Coupled with the growth of purpose-driven businesses, the technological response to the pandemic could promote meaningful change.

02.

Embedding social purpose

A majority of respondents (56 percent) believe corporations generate value for all stakeholders—employees, clients, communities and shareholders—by earning profits in a sustainable way that includes minimizing harm to society. An additional 14 percent see the corporation’s role as contributing to social challenges to generate long-term stakeholder value.

The majority, stakeholder-centric cohort, have not only embraced a more evolved and global view of the corporation’s responsibility beyond pure profit for shareholders, but also have put into place mechanisms allowing them to create a culture and metrics around their purpose via a formal mission statement. They have done this at a significantly higher rate than the investor-centric respondents.

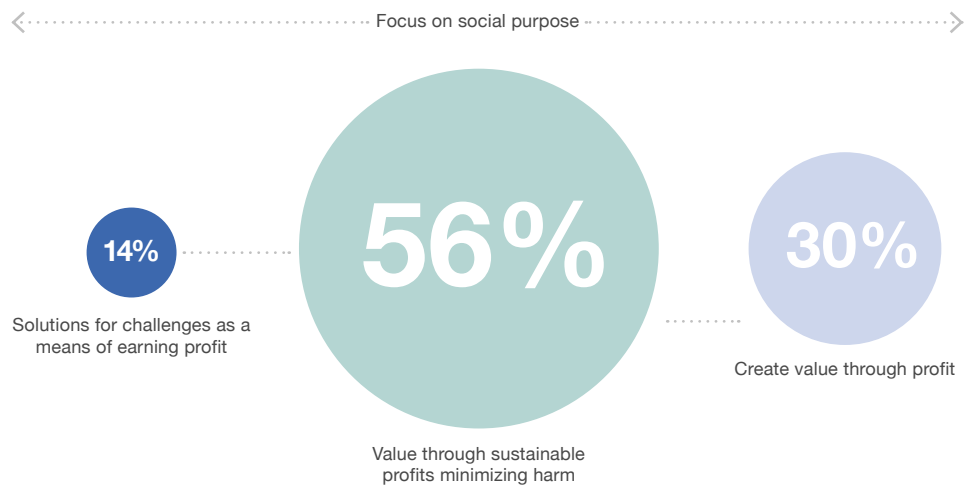
The sharpest contrasts between stakeholder-centric and investor-centric leaders relate to the goals that drive their social-impact strategies, rather than the strategies they use to drive them. A majority of the latter say that, while their social-impact strategy delivers community benefits, they do not assess financial outcomes. By contrast, 80 percent of stakeholder-centric executives say they pursue parallel financial and community outcomes, and see social-impact strategies as essential to financial returns, not separate from them.

When asked who in the organization has the most influence on its social-impact strategy, while both cohorts agree the CEO is the most influential among those roles measured, the stakeholder-centric respondents are significantly more likely to put the responsibility with the CEO (59 percent, compared with 45 percent). **(Figure 3)**

Executive-level commitment from the CEO and the board are major drivers of successful social-impact programs.

Figure 3.

What is your personal view of the corporation in global society today?



Source: 2020 WSJ Intelligence and NTT global survey.

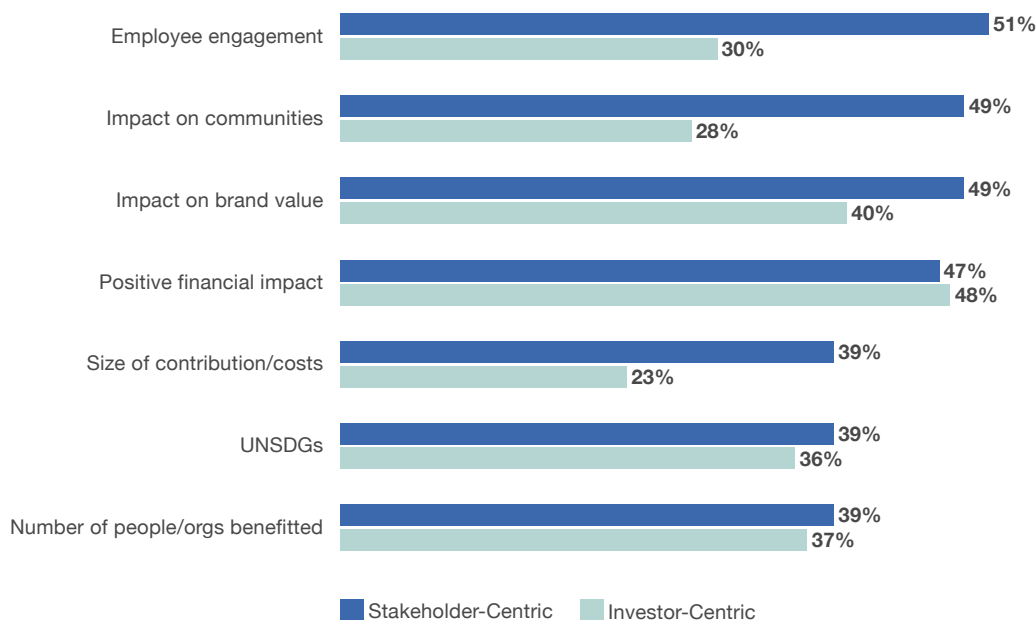
Social impact and corporate strategy

The research shows that major corporations take their social-impact programs seriously, exploiting multiple promulgation mechanisms and aligning them with broader business objectives. Each one is used more or less equally: executive performance agreements (55 percent); cultural messaging for employees (54 percent); annual sustainability reports (53 percent); statements of purpose (48 percent); and core business strategies (47 percent). More notably, almost everyone employs at least one; only one percent of respondents don't use any.

Several other methods are common, from external benchmarks to align measurements and outcomes (48 percent), to embedding KPIs in executive compensation schemes (48 percent). Other methods are common, from external benchmarks to align measurements and outcomes (48 percent) to embedding KPIs in executive compensation schemes (48 percent).

The findings show no clear preference for any particular measurement tool, but rather the most common approach is to use multiple metrics to measure success. Respondents used an average of three. Moreover, the data suggest that use of objective performance criteria aligns with a strong sense of purpose. Organizations employing four or more different measures are substantially more likely to have aligned their business with their social-impact strategy, and be deeply concerned with the health and wellbeing of their employees and the wider community (Figure 4).

Figure 4. Which metrics are used to measure the impact of your organization's social programs?



Source: 2020 WSJ Intelligence and NTT global survey.

“Being away from the workplace has been very hard for many employees, particularly Millennials,” says Mark Alexander, CEO of Cloud Communications at NTT. “Even those who have enjoyed working from home say they want to have some time in the office.”

Health and wellbeing

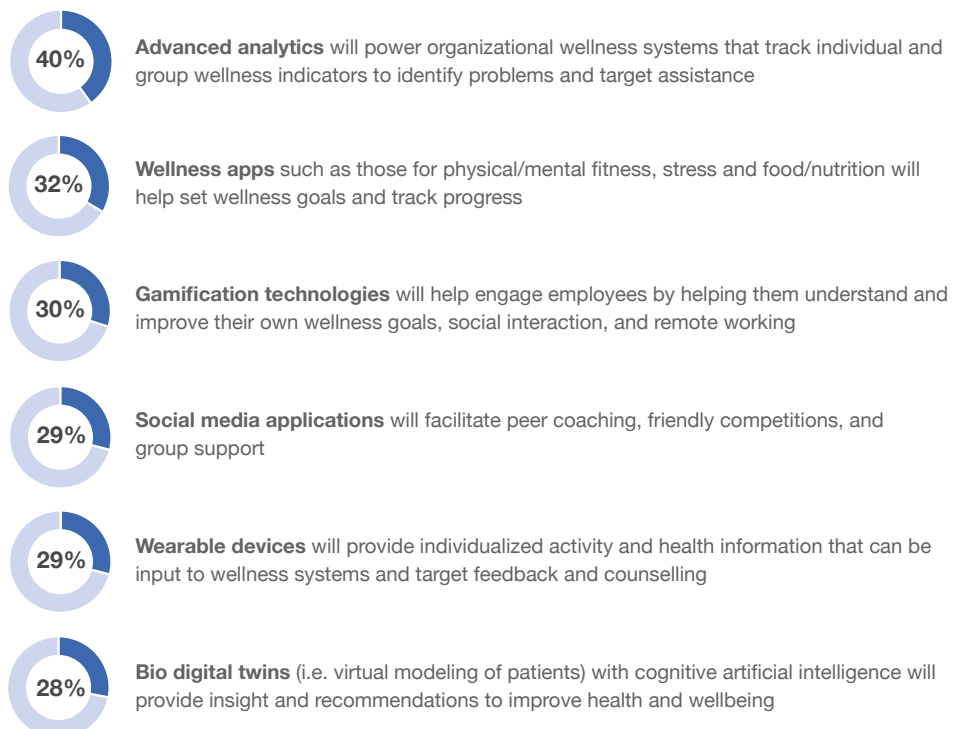
Executives say their social-impact strategy is most strongly influenced by health and wellbeing—of employees, customers and communities. This is clearly a central theme as businesses aim to reopen post-pandemic, and technology is vital here, too. Companies are using AI to scan crowds and detect people with a fever, and deploying mobile applications together with cloud technology to monitor potential exposure to the virus. All this is vital in permitting a safe return to work.

One-third of respondents (32 percent) said wellness applications, such as those for fitness or nutrition, would be the most useful technological tool for boosting organizational health and wellness. Almost as many (30 percent) were positive about gamification—incentivizing people through competition with others or against their previous best—as a way to reach health and wellness goals (Figure 5).

Data drives these applications, and organizations were particularly optimistic about the potential for advanced data analytics, powered by artificial intelligence. One-third (34 percent) said this could help decision-makers anticipate health threats in time to take effective action, at national or international level. Within an organization, analytics could help tackle issues such as workplace stress (Figure 8).

Figure 5.

Which of the following mechanisms will provide the best future opportunities for improving organizational health and wellness?



Source: 2020 WSJ Intelligence and NTT global survey.

Supporting the supply chain

Other considerations for social-impact strategies include the stability of the business ecosystem and its environmental impact, as well as supply-chain stability and the effect of that on the environment. The pandemic's origins in China, a global manufacturing hub, delivered an immediate shock to supply chains in many industries worldwide. Factory closures, and social-distancing measures once they reopened, also had an inevitable effect on output.

Even without the pandemic disruption, the supply chain is a challenge for organizations. In our research, 36 percent of respondents said the supply chain had a massive impact on their corporate strategy—behind only the pandemic itself. We are moving toward connected supply chains that have multiple levels of connections that are enabled by multiple levels of technology. This creates a stronger and more resilient supply chain, so we can afford future situations where the supply chain is disrupted and will have the flexibility to adjust quickly.

Resilient, flexible and connected global supply chains are a strategic imperative for enterprises and governments.

03.

Using technology to power social impact

Senior executives understand that technology can disrupt social stability—but it also powers the tools and opportunities they need to tackle social issues. We must find ways to increase inclusion of more people in the new world, where technology is not optional. The negative impacts of technology mostly concern difficulty in managing the spread of information. Respondents agree that the dangers of identity theft and invasion of privacy are equaled in urgency only by the threat of increased polarization from the rapid spread of false and misleading information (tied at 45 percent). The use of personal and private information to influence opinions and creative division stands close behind (38 percent).

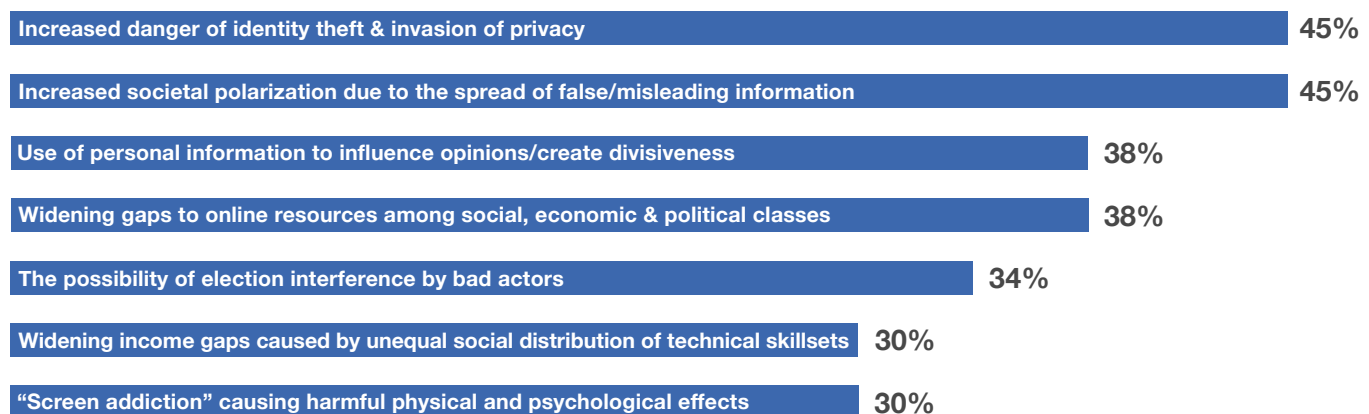
Other technology issues are important, but ranked somewhat lower in executives' list of threats. These include malicious election interference (34 percent), screen addiction (30 percent), and widening inequality due to unequal technical skillsets (30 percent). (Figure 6).

Of 11 technologies included in the survey, cybersecurity is the only one assessed by a majority of executives as being “fully adequate” for their social-impact strategy. Adequacy appears to correlate with maturity. The technologies considered least adequate are also the newest: VR/AR (34 percent); quantum computing (36 percent); biotech and digital twins (34 percent); and additive manufacturing (36 percent). (Figure 7).

Unfortunately, criminals can benefit from technology, too. Automated cyberattacks carried out by ‘bots’ have been increasing and the weapons in a cybercriminal’s arsenal now include deep fakes—recordings and images manipulated using AI to impersonate people’s voice and appearance.

Figure 6.

Which of the following are the most important ways in which technology may be a negative influence in addressing societal issues?



The importance of cybersecurity

Companies risk financial loss if they fall victim to cybercrime, fines from regulators if they are deemed not to have implemented the proper security measures, and reputational damage, which could cause customers and investors to lose faith. Cybersecurity is therefore essential.

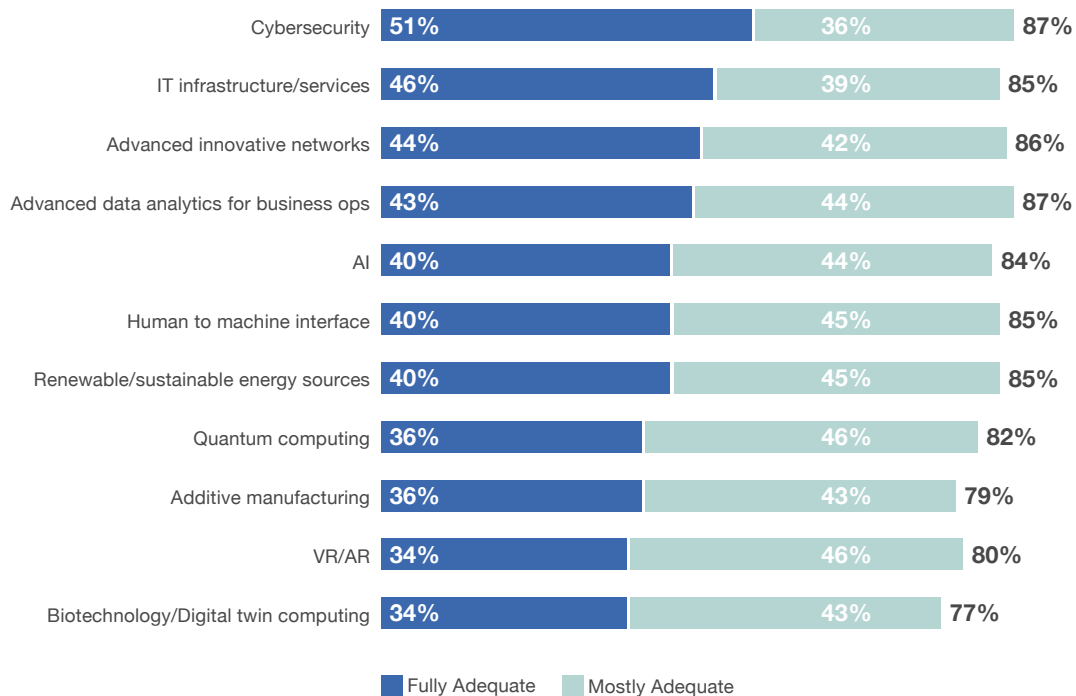
Cybersecurity is responding to new threats by, among other things, moving to the cloud. Cloud-based security tools can gather information from many customers and identify and respond to emerging threats using data analytics and automation. Another area of focus is on embedding security in the design of new products and services. Security is often an afterthought—something to add at the end—which often leaves loopholes. A better approach is to make products and services, from connected cars to factory equipment, ‘secure by design.’

“Visibility is a major challenge,” says Matthew Gyde, President and CEO of NTT’s Security Division. “Companies don’t have the visibility to be sure that they are more secure than they were before.”

Cybersecurity technologies are adequate today, but adoption is not fast enough or sufficiently complete yet

Figure 7.

To what extent do the following technologies currently provide the capabilities needed to successfully execute your organization’s social impact programs?



Source: 2020 WSJ Intelligence and NTT global survey.

Communications networks and sustainability

Senior executives were asked to identify the technology-driven solutions that will provide the best opportunities for solving some of the world's most vexing problems, including economic inequality, health and safety, sustainability and diversity. In our survey, 39 percent said that high-performance communications networks are the most promising technology for addressing these issues. A similar number, 38 percent, said cloud computing is most promising, while 34 percent selected advanced analytics. In truth, the three are closely connected (**Figure 8**).

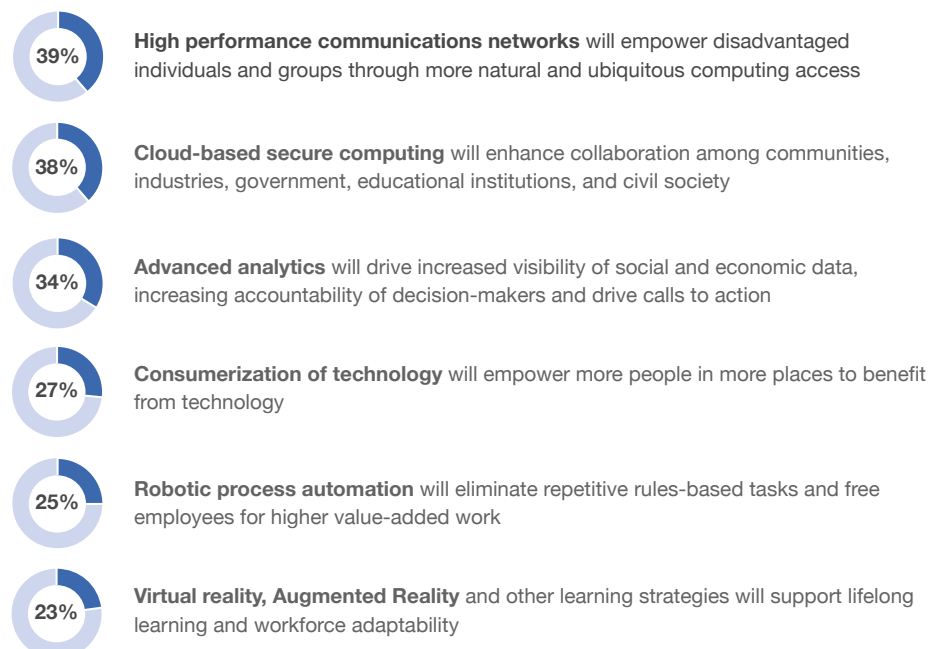
Working at home might have lessons for post-pandemic life, too. One-third of survey respondents said workplace technology and services are most promising for sustainability because they will reduce commuting and ease pressure

on high-density locations, cutting pollution and energy consumption. Our new remote world is also a highly connected world. While many workers want—and need—to be in a workplace alongside their colleagues and customers, greater freedom to work remotely can improve health and wellbeing by reducing the stress caused by daily commuting and by allowing more time at home, closer to family members and our local communities.

The pandemic has presented us with many challenges. The way they are solved will shape the way we live from now on. We can create a more natural world with technology, ensuring that everyone can benefit from our highly connected world without even needing to know that the technology exists. We have the opportunity to recover by laying the foundations for a more sustainable, purpose-driven economy.

Figure 8.

Which of the following mechanisms will provide the best future opportunities for emerging technologies to address economic and social gaps?



Source: 2020 WSJ Intelligence and NTT global survey.

Conclusion

As the world combats Covid-19 and begins to recover, digital technology and social-impact programs will help to create the ‘new normal.’ This is about more than just being prepared for another pandemic. It is about helping us face the challenges of sustainability and global inequality— issues exacerbated by the pandemic, but which were already on the agenda for many companies with a social purpose.

Our world is rapidly becoming more digitally led and this trend will continue at pace. Industries like healthcare will see

more of their infrastructure delivered in the cloud and augmented by automation. Our factories, cities and supply chains will be increasingly digitized—monitored by sensors and managed by artificial intelligence. Keeping all of this secure will be challenging, but vital.

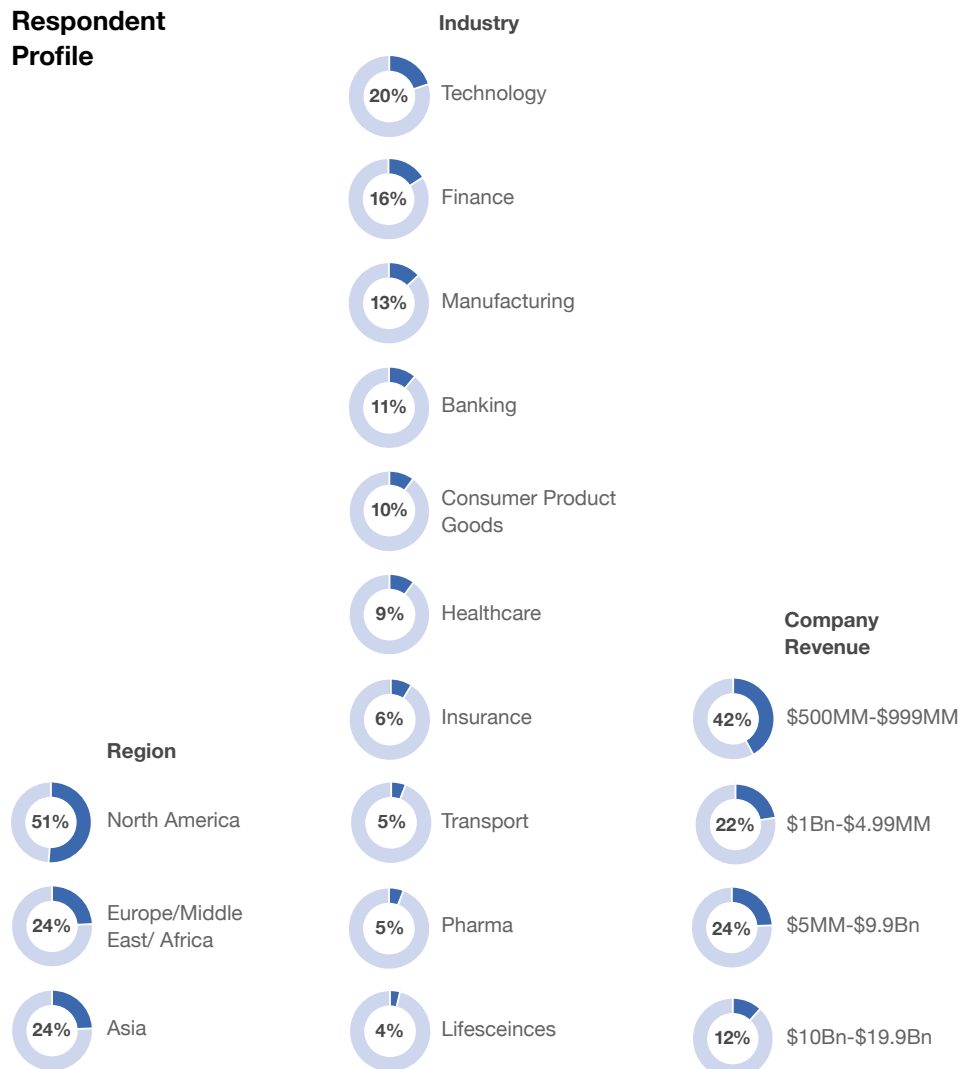
The recovery from Covid-19 presents every organization with the opportunity to think anew and accelerate digital transformation. It is an opportunity that must be seized.

About this research

This research was conducted in July-August 2020 among CEOs across 15 countries, who participated in an online survey that aimed to understand how they viewed their company’s responsibility to contribute, visibly and substantively, to achieving societal goals. Globally, 352 CEOs at companies with more than US\$500M in revenue (with 75 of U.S. respondents at companies with more than \$1BN) participated in quantitative research across 10 industries. “Investor-centric” respondents were defined as those whose view of the corporation is strictly to create value for shareholders by earning profit. “Stakeholder-centric” respondents answered either: *“To create value for all stakeholders by earning profits in a sustainable way, which includes minimizing the harm that the business causes to society”* or *“Contribute to solutions for the challenges confronting people and society as a means of earning profits and generating long-term stakeholder value”* when asked for their view of the role of the corporation in global society today.

The Wall Street Journal news organization was not involved in the creation of this content.

Respondent Profile



Source: 2020 WSJ Intelligence and NTT global survey.