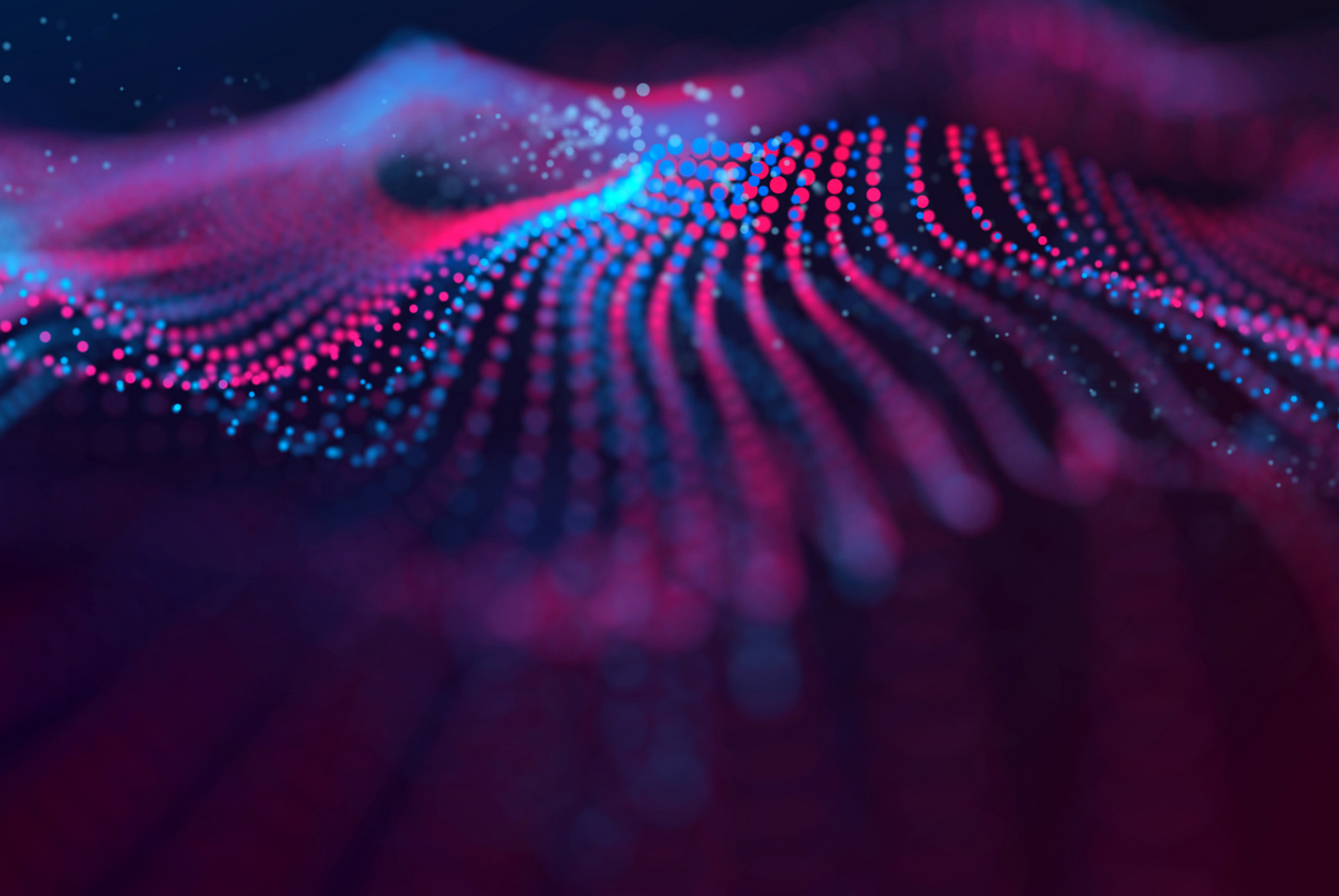
ECONOMIST IMPACT

Building business value

Resilience in a rapidly evolving global environment



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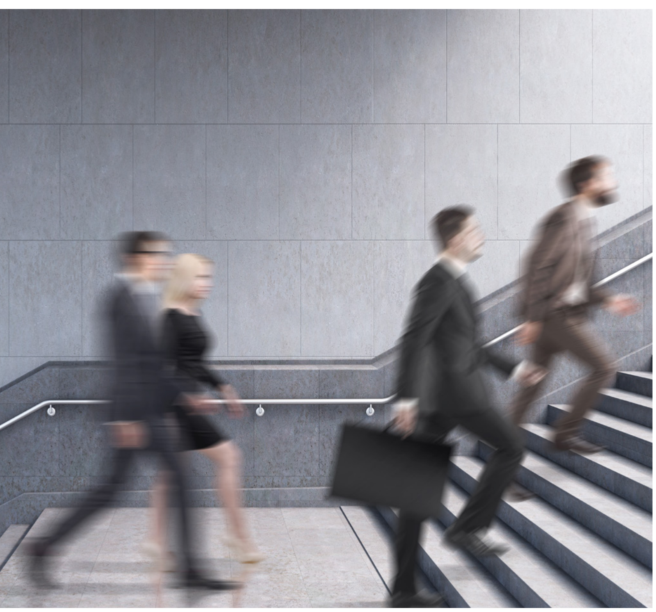
Preface



This report by Economist Impact, and sponsored by Dataminr, explores the nexus of business value and resilience across people, assets and brands. The report is based on extensive desk research, expert interviews and a survey of 600 business executives across Asia, Europe and North America.

The report was written by Sofia Economopoulos and Monica Woodley, and edited by Paul Tucker and Pratima Singh.

We would like to thank the following contributors for providing additional insights:

- **Beng Teck Aw*,** director, regional marketing and communications, NEC
- **Michael Cairo,** chief security officer, GE
- **Dax Lovegrove,** global director of sustainability, Jimmy Choo & Versace
- **Martin Reeves,** Chair of the BCG Henderson Institute
- **Michelle Tuveson,** executive director, Cambridge University Judge Business School Centre for Risk Studies

*This individual was at NEC at the time of the interview but has since left the organization.

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Introduction

Business value can be a nebulous term, understood differently between and even within companies. Its definition depends on the target of the value. According to Nobel-winning economist Milton Friedman, shareholders were considered to be the main recipients. Today, however, businesses face pressure to create value for a wider range of stakeholders—employees, customers, the supply chain and the communities in which they operate. This shift expands value beyond what can be measured in purely monetary terms. The growing importance of intangible resources, such as intellectual property and digital assets, has further transformed the concept of business value, pushing it beyond the physical realm of property, machinery and capital goods.

Companies work to protect what they see as intrinsic to their continued operations. Therefore, an essential element to a company's value strategy is a concurrent approach to resilience—the proactive capacity to absorb stress, recover critical functionality and thrive in altered circumstances.[1] The disruption of normal working practices and supply chains during both the covid-19 pandemic and the energy crisis sparked by Russia's invasion of Ukraine have aptly demonstrated the need for business resilience—and the necessity of preparing for the most unexpected of scenarios.

How did those companies that thrived during the pandemic not only stay resilient but also create new value? Michael Cairo, chief security officer at GE, argues that business resilience is specific to each company and is based on a series of factors, including broad capabilities in crisis management, emergency response and digital protection.

In order to uncover what companies value, the strategies they are employing to protect those assets and create resilience, where they see risk and opportunity, and how prepared they feel for future changes, in December 2022 and January 2023 Economist Impact, supported by Dataminr, conducted a bespoke survey of 600 senior business leaders. Respondents represent companies from six industries (retail, pharmaceuticals, tech, energy, financial services and manufacturing), located across North America, Europe and Asia-Pacific, that have annual revenues of at least US$500m.[2]

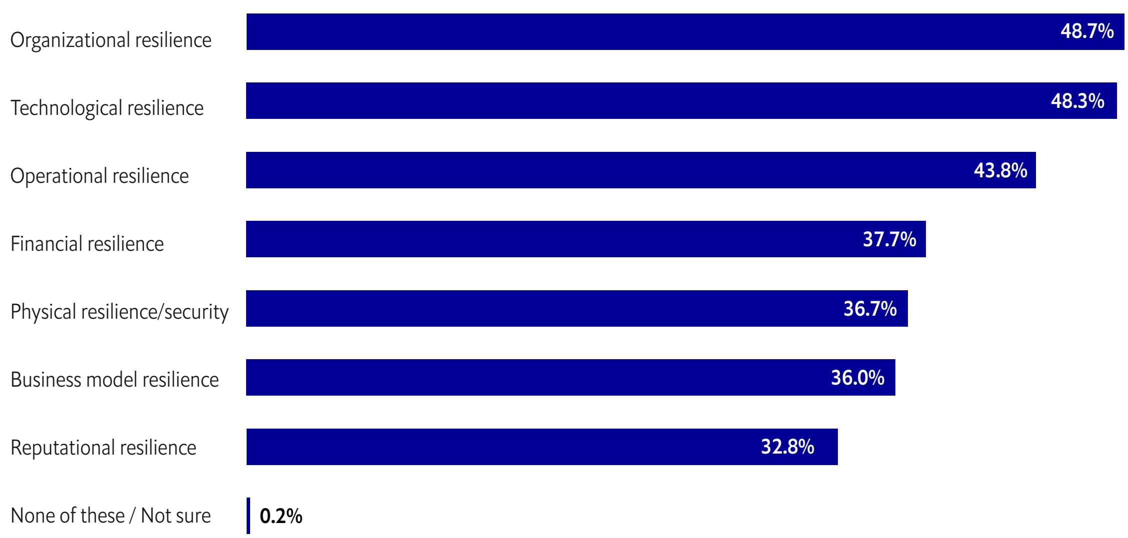
In examining companies' value creation and resilience priorities, Economist Impact found that three pillars were foundational to building resilience: organizational, technological and operational. Within this context, two key themes emerged. First, there is a growing need to integrate ESG (environmental, social and governance) policies into corporate strategy. Second, there is a need to better protect and enhance digital assets in order to capitalize on value creation opportunities.

[1] BCG Henderson Institute. Becoming an all-weather company. August 2020. Available from: https://bcghendersoninstitute.com/becoming-an-all-weather-company/
[2] Additional survey demographics are included in the appendix.

Section 1: Building the pillars of resilience

Overall company resilience can broadly be categorized as business model, financial, operational, organizational, physical, reputational and technological resilience.[3] Survey respondents by and large chose organizational, technological and operational resilience as the top three resilience types that their organizations prioritize the most.

Figure 1: Respondents chose organizational, technological and operational resilience as key priority areas to enhance business value



Source: Economist Impact survey (Q15: Which of the following does your organization prioritize most? Please select up to 3.)

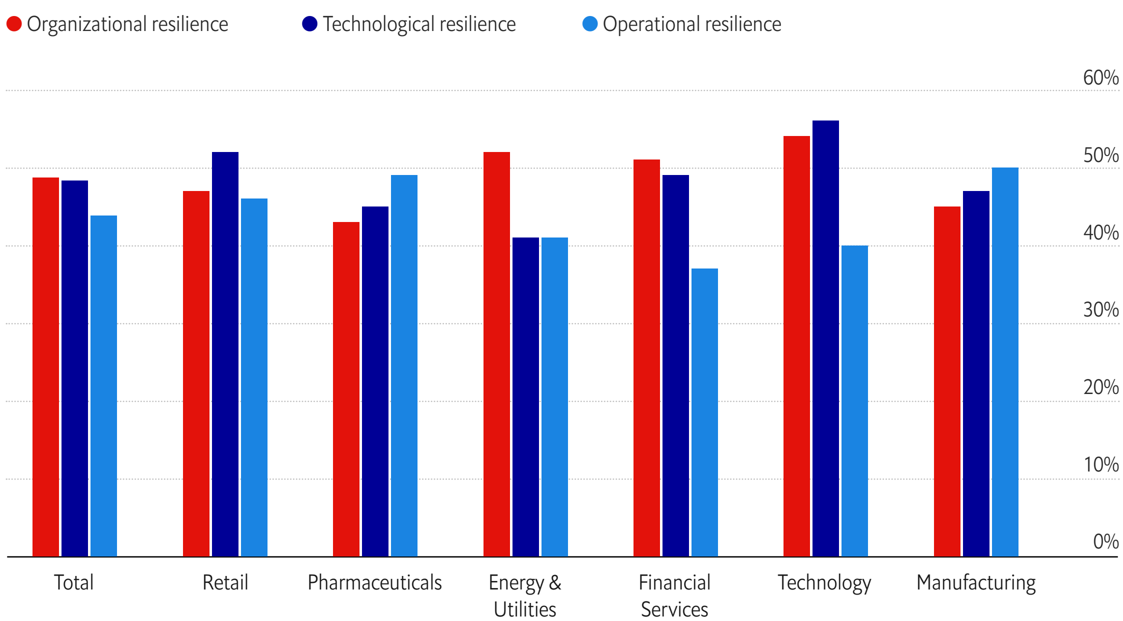
[3] See appendix for definitions of each.

"[The pandemic] highlighted many of the human rights dimensions of the workplace, which transcends into flexibility."

Dr. Michelle Tuveson, Executive Director of Cambridge University's Judge Business School Centre for Risk Studies

Almost half of survey respondents said that organizational resilience—maintaining a company culture that focuses on inclusive governance structures, open communication and internal initiatives to make employees feel connected and engaged—is prioritized most within their company. This finding is consistent with the reimagination of working arrangements that occurred during and after the coronavirus pandemic. The pandemic "highlighted many of the human rights dimensions of the workplace, which transcends into flexibility," says Michelle Tuveson, executive director of Cambridge University's Judge Business School Centre for Risk Studies. This encouraged employees to speak up for what mattered to them in their working environment. Organizations have since responded through updated policies to keep these employees motivated and engaged.[4]

Figure 2: Respondents in the retail and energy sectors prioritized technological resilience, while pharmaceuticals and manufacturing prioritized operational resilience. Organizational resilience remains a high priority across industries



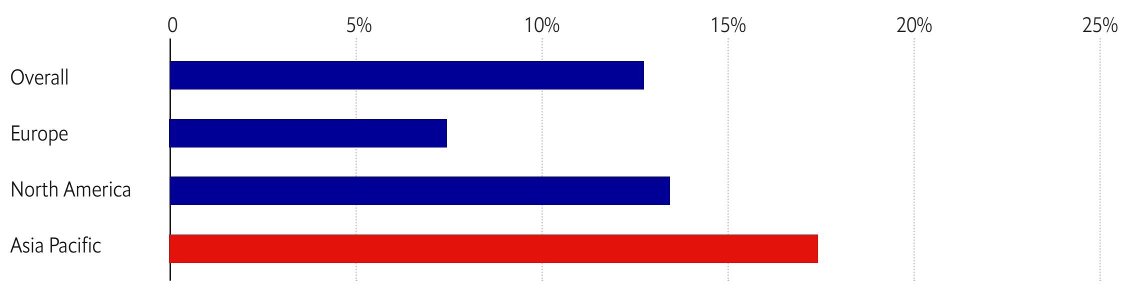
Source: Economist Impact survey (Q15: Which of the following does your organization prioritize most? Please select up to 3.)

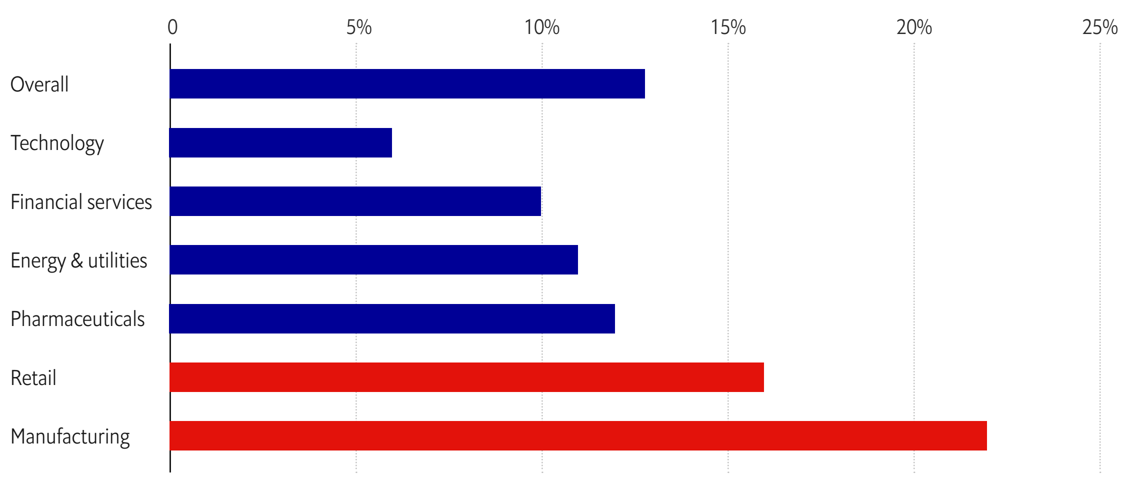
[4] Sull D, Sull C. How companies are winning on culture during COVID-19. MIT Sloan Management Review. October 2020. Available from: https://sloanreview.mit.edu/article/how-companies-are-winning-on-culture-during-covid-19/

Technological resilience—the safeguarding of an organization's data, complying with data localization requirements, and protecting the firm's information technology/operational technology [IT/OT] systems and digital assets—was equally deemed a top priority, which corroborates survey respondents' choice of digital assets as most important to their organization's business strategy. In addition to the long-term trend of greater digitalization, technological resilience became much more vital to business continuity and operations.

The third-ranked resilience pillar is related to operations: ensuring production capacity, supply chains, and distribution networks are protected and adaptable to changing circumstances. During the pandemic lockdowns and border closures kept workers from factories and halted or slowed the transportation of goods, disrupting production and creating supply-chain shocks that exposed operational weaknesses.

Figure 3: Respondents in the Asia Pacific region (top chart) and those in the retail and manufacturing sectors (bottom chart) are particularly wary of the adverse impact of future supply-chain shocks. Respondents in retail and manufacturing are more concerned about future supply-chain shocks than their other industry counterparts





Source: Economist Impact survey (Q10: What type of impact do you expect the following to have on your organization's ability to thrive in the next three years?).

Our survey reveals that 12.8% of respondents are concerned about the potential negative impact of future supply-chain shocks. Almost 14% of respondents in North America and 17.5% of respondents in Asia are concerned about future supply-chain shocks—far outstripping the 7.5% of their European counterparts who raised concerns. On a sectoral basis, retail and manufacturing executives are the most concerned about the negative impacts of future supply-chain shocks, illustrating the supply-chain challenges that these two industries continue to face even as the pandemic subsides.

In response, companies have implemented new supply-chain strategies. To build resilience and improve flexibility, they have diversified their suppliers, used near-shoring to bring production closer to their customer base, or utilized technology to further automate logistics and improve real-time management and information flows.[5,6]

Those businesses that adapted during the pandemic, making changes to improve organizational, technological and operational resilience, saw a clear impact on their overall success. According to Martin Reeves, Chair of the BCG Henderson Institute, while those companies that emerged as the 'new winners' demonstrated an anticipation advantage (looking for emerging risks and preparing for disruption), it was their adaptation and re-imagination advantages (the ability to experiment, be agile, develop operational flexibility and shift their portfolio mix and innovate against new opportunities) that really helped them to thrive. In other words, winners did not just adapt to the new normal, they also helped to define it by building new partnerships and launching industry-shaping products. They increased their research and development (R&D) intensity by two to three times from the second quarter of 2019 to 2021, while those who underperformed decreased R&D by a third. This solidified the winners' outperformance in the long term.[7]

[5] Sanders N. How COVID changed supply chains forever, according to a distinguished professor in the field who's studied them for the last 2 decades. Fortune. January 2023. Available from: https://fortune.com/2023/01/11/how-covid-changed-supply-chains-forever-distinguished-professor-just-in-case-just-in-time-onshoring-technology/

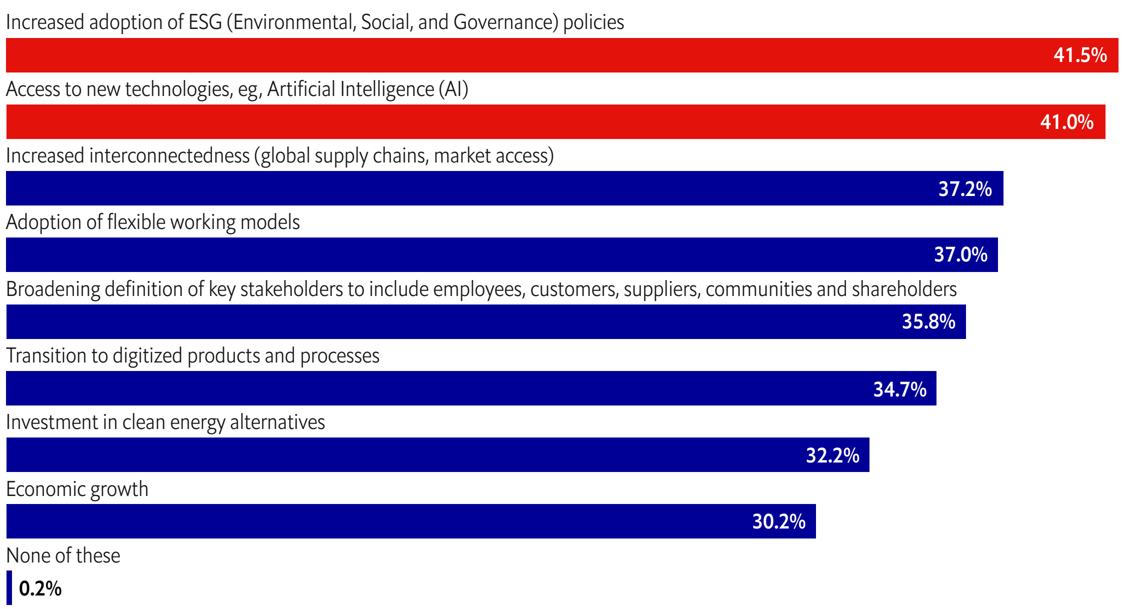
[6] Peter Weckesser, Schneider Electric

[7] BCG Henderson Institute. The COVID scoreboard: how resilient businesses emerged new winners. October 2021. Available from: https://bcghendersoninstitute.com/the-covid-scoreboard-how-resilient-businesses-emerged-new-winners/

Section 2: The rise of the conscious customer

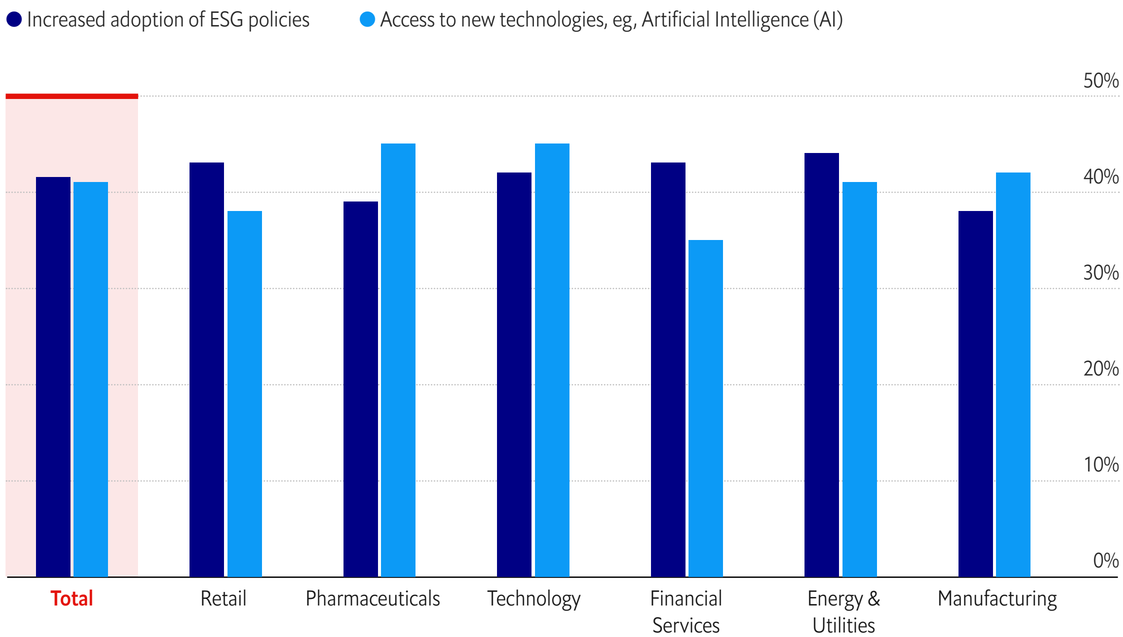
We found that two key themes stood out among companies' resilience priorities: strong ESG policies and protection of digital assets. As the world recalibrates post-pandemic, businesses are shifting their focus to the risks posed by climate change and finding opportunity in the changes that will be needed to create a net-zero economy. Survey respondents cited the increased adoption of ESG policies as the most significant opportunity to create value in the next three years, followed closely by access to new technologies. Respondents in the financial services sector also pointed to investment in clean energy alternatives as a top value-creating opportunity.

Figure 4: Respondents said that increased adoption of ESG policies and access to new technologies are the two most significant opportunities to create value in the next three years



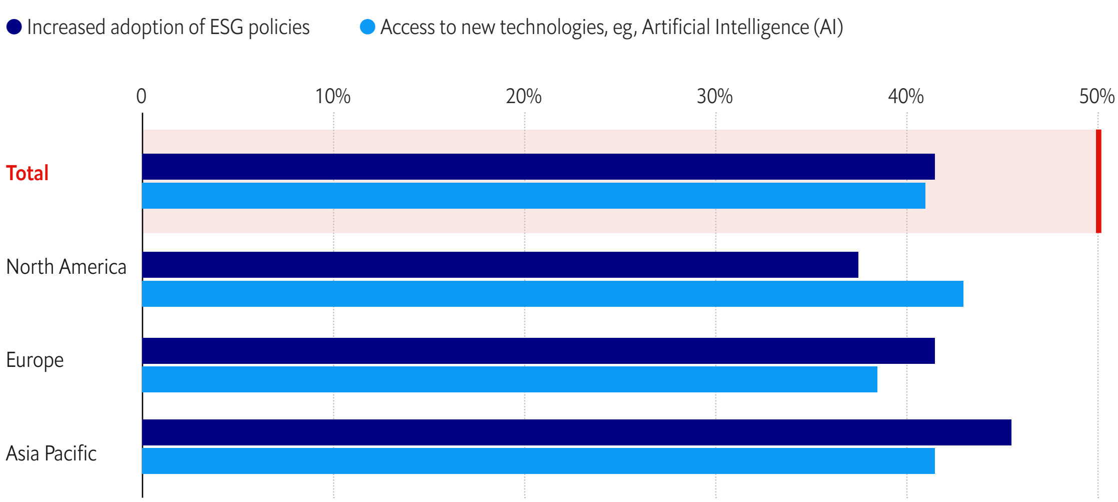
Source: Economist Impact survey (Q12: Which of the following are the most significant opportunities for your organization to create value in the next three years? Select up to three.).

Figure 5: Respondents in the pharmaceutical, technology and manufacturing industries all said that access to new technologies is the top priority, while respondents in retail, financial services, and energy and utilities said that ESG policies are the main priority



Source: Economist Impact survey (Q12: Which of the following are the most significant opportunities for your organization to create value in the next three years? Select up to three.).

Figure 6: Respondents in Europe and Asia Pacific demonstrate clear prioritization of increased adoption of ESG policies, while those in North America are prioritizing access to new technologies



Economist Impact survey (Q12: Which of the following are the most significant opportunities for your organization to create value in the next three years? Select up to three.).

Pharma, tech and manufacturing industry respondents (as well as those in North America, more broadly) see significant opportunity for value creation through "broadening [the] definition of key stakeholders to include employees, customers, suppliers, communities and shareholders", a distinct departure from the original shareholder primacy model towards more intentional corporate governance structures, covered under the "G" of ESG.

A recent meta-study examining the relationship between ESG and financial performance found a positive influence from ESG in the majority of the studies, with improved performance becoming more significant over longer time periods. It also found that ESG integration provides downside protection, especially during crises.[8] Adopting ESG policies is one of the ways that companies can help to prepare themselves for future shocks such as extreme weather events, climate change and mandatory disclosure regulations, as well as improve their balance sheets.

Figure 7: Respondents overall said that managing an ESG communications strategy is a key part of their organization's brand strategy, and respondents in North America and Europe believe that it should be prioritized most for their organization's brand

Source: Economist Impact survey (Q24: Which of the following are aspects of your organization's brand management strategy? Please select all that apply; Q25: Which of the following do you believe your organization should prioritize most for its brand(s)? Please select up to three.).

Dr. Tuveson says ESG is no longer simply the domain of corporate social responsibility. The growth of chief sustainability officer positions in corporations highlights the expanding integration of sustainability across individual businesses, with significant cost and organizational implications. As ESG disclosures move from voluntary to regulatory requirements, companies are increasingly being held accountable for their emissions. Dr. Tuveson believes that this will create enormous pressure on companies to change, and also to lead change throughout their supply chains, which on average can account for 65-95% of a company's carbon footprint.[9]

This focus on ESG is not just coming from investors and regulators. Dax Lovegrove, global director of sustainability at Jimmy Choo and Versace, is seeing growing pressure from all sides—investors, regulators, peers, NGOs, staff and customers—to take deeper and more transparent action on ESG and sustainability. For example, he observes that increasing customer preferences for plant-based alternatives is spreading from the food sector to fashion, where there is research and development around new materials such as mushroom leather.

Our survey shows that businesses recognize the rise of the conscious customer and believe that managing an ESG communications strategy is a vital part of their brand strategy. Respondents recognized it as a top priority for both now and the future.

[8] Whelan T, Atz U, Van Holt T, Clark C. ESG and financial performance: uncovering the relationship by aggregating evidence from 1,000 plus studies published between 2015-2020. Available from: https://www.stern.nyu.edu/sites/default/files/assets/documents/NYU-RAM_ESG-Paper_2021%20Rev_0.pdf
[9] Cox E, Herman C. Tackling the scope 3 challenge. PWC. 2022. Available from: https://www.pwc.com/gx/en/services/sustainability/climate/scope-three-challenge.html

Section 3: Resilience in a digital world

As our world becomes increasingly digital, so too does the value proposition of businesses today. For example, while companies attempt to build value through their customer-facing digital assets like websites or social media, it is the data that they collect in the process that is the biggest asset of all. Data collection, protection and privacy have thus become a priority for companies, customers and regulators. Survey respondents agreed, with 48.3% saying that their organizations prioritize safeguarding the organization's data, complying with data localization requirements, and protecting its IT/OT systems and digital assets. We also found that data protection policies and procedures are among respondents' most business-critical strategies.

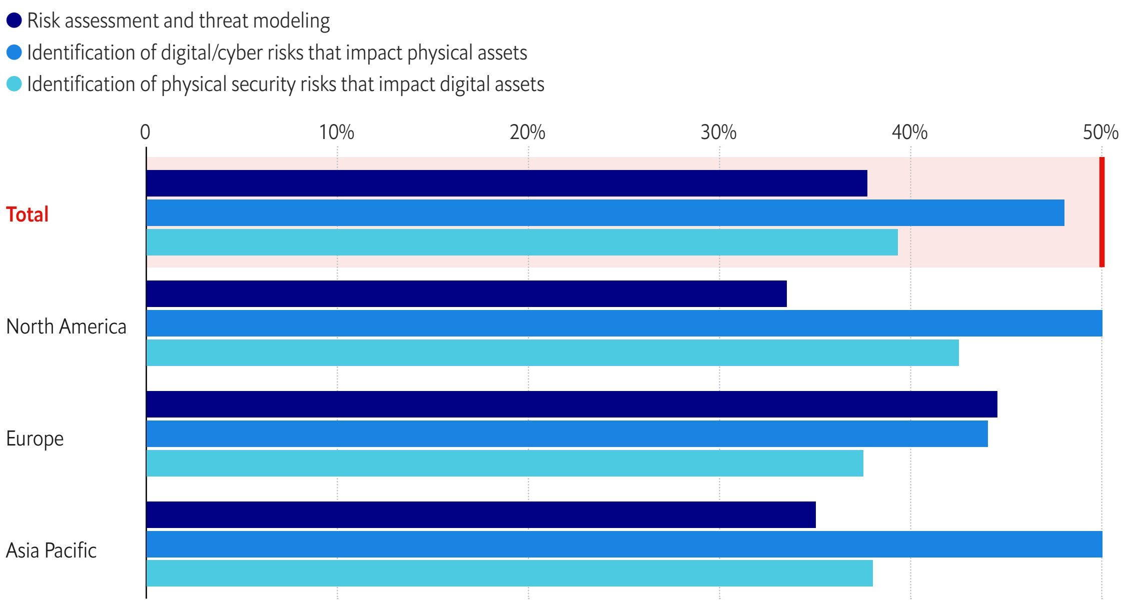
48.3%

of survey respondents say that their organizations prioritize safeguarding the organization's data, complying with data localization requirements, and protecting its IT/OT systems and digital assets.

However, to create resiliency, companies must anticipate associated risks and protect asset value even as threats evolve. In the digital world, this means staying ahead of threats like cyber-attacks. According to The Economist Intelligence Unit's Operational Risk Briefing, cyber-attacks occurring on business or government have only increased since January 2019. Countries like the US, the UK, Switzerland, Singapore, Canada and Finland had the highest risk consistently across the four-year period covered by the EIU's assessment. Dr. Tuveson also points to a related growth in ransomware attacks, in which a criminal group prevents a company from accessing their IT and data systems, demanding a ransom in exchange for decryption.

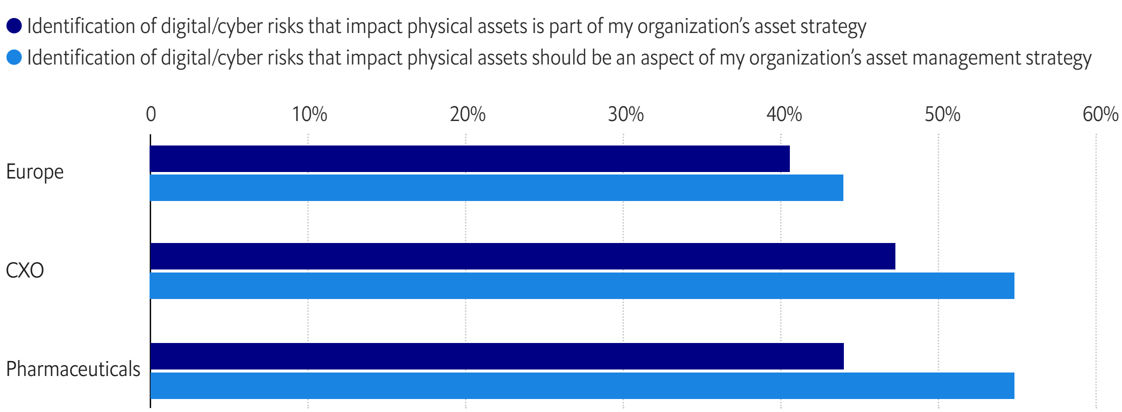
Survey respondents said that their organizations have a range of strategies in place to safeguard their digital assets. These include risk assessment and threat modeling, business continuity and disaster recovery plans, and identification of physical security risks that impact digital assets. (For more on this topic and on how physical and digital risk converge, see box-out).

Figure 8: Respondents across regions said that they believe their organizations should prioritize risk assessment and threat modeling, as well as identification of physical security risks that impact digital assets, as part of their approach to manage digital assets. They also believe identification of digital/cyber risks that impact physical assets should be part of their organizations' approach to physical asset management



Source: Economist Impact survey (Q21: Which of the following do you believe your organisation should prioritise most for its physical assets? Please select up to 3.; Q23: Which of the following do you believe your organization should prioritize most for its digital assets? Please select up to three.).

Figure 9: CXO respondents, as well as respondents in Europe and the pharmaceutical industry, highlighted the identification of digital/cyber risks that impact physical assets as an important aspect of their organization's approach to managing its physical assets.



Source: Economist Impact survey (Q22: Which of the following are aspects of your organization's approach to managing its digital assets (that is, data, website, IT/OT platforms)? Select all that apply; Q23: Which of the following do you believe your organization should prioritize most for its digital assets? Please select up to three.).

Protecting digital assets is the first step. Even as companies mitigate the risks, they are rapidly responding to customers' evolving needs and using digital assets and new technology to create brand value. For example, according to a senior leader at NEC, several companies are upgrading their websites to adopt AI to help recognize specific visitors and personalize the user journey. The hope is that this will not only make customers more likely to find and eventually buy what they need, but also serve as a showcase of the company's technological capabilities. In fact, the senior leader sees all of NEC's internal digital transformation as a use case for processes and assets that can be sold to customers.

A deeper dive into the results of our survey also supports the connection between brand value and digital assets. Overall, survey respondents said that monitoring an online presence, including all mentions positive and/or negative, is one of the top three aspects of their organization's brand management strategy. In the Asia Pacific region and for those in the manufacturing industry, it was the aspect prioritized most.

Dataminr-branded perspective: All roads lead to convergence

The physical and digital worlds are more connected than ever before. Inextricable links can be seen across industries and organizations of all types, with businesses and consumers reliant on both the cloud and Internet of Things (IoT) and Industrial Internet of Things (IIoT) devices in ways that they were not ten or even five years ago.

This creates new and expanding vulnerabilities and risks, including a rise in the convergence of cyber and physical risks, whereby a threat that originates in the cyber domain becomes a real and significant threat in the physical domain and vice versa. The effects can be wide ranging, from consumer inconvenience to life-threatening situations. For example:

- A 2022 cyber-attack compromised a Florida health service's computer systems, forcing it to reroute emergency patients and cancel non-critical surgery.[10]
- A 2021 attack on a global software company led to the shutdown of 800 grocery stores in Sweden.[11]

Given that cyber-physical risks vary greatly in their size, scope and impact, Dataminr views the risks on a threat spectrum. At one end are kinetic events that affect the cyber infrastructure of organizations and industries, such as physical threats to information technology (IT) and operational technology (OT) infrastructure, and network and power outages. At the opposite end are cyber events that affect the physical domain, such as attacks against critical infrastructure that can lead to supply-chain disruption and third-party and vendor risk. In the middle of the spectrum is geopolitical instability that causes disruption.

Governments are taking note. In March 2023 the US government created a cyber-physical resilience working group, and in December 2022 the EU created a new cybersecurity directive that includes physical entities and services.[12,13]

To strengthen resilience against this evolving risk type, organizations must make managing cyber-physical convergence a business imperative.

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[10] CNN. Apparent cyberattack forces Florida hospital system to divert some emergency patients to other facilities. February 2023. Available from: https://www.cnn.com/2023/02/03/politics/cyberattack-hospital-tallahassee-memorial-florida/index.html

[11] New York Times. Hundreds of businesses, from Sweden to the US, affected by cyberattack. July 2021. Available from: https://www.nytimes.com/2021/07/02/technology/cyber-attack-businesses-ransom.html

[12] PCAST Initiating Working Group on Cyber-Physical Resilience. Building resilience to failure, disruption and degradation for critical infrastructure. White House. March 2023. Available from: https://www.whitehouse.gov/pcast/briefing-room/2023/03/15/pcast-initiating-working-group-on-cyber-physical-resilience/

[13] European Commission. New stronger rules start to apply for the cyber and physical resilience of critical entities and networks. January 2023. Available from: https://digital-strategy.ec.europa.eu/en/news/new-stronger-rules-start-apply-cyber-and-physical-resilience-critical-entities-and-networks

Conclusion

In today's unpredictable world, resilience is the lynchpin of business value. Companies must prioritize people as a core part of organizational strategy; safeguard digital assets and systems; and protect supply chains, production capacity and distribution networks. This will leave them better equipped to respond to the opportunities and challenges of today and tomorrow. The three key pillars of resilience—organizational, technological and operational—will separate the winners from the losers.

With these foundations of resilience in place, businesses can then prioritize conscious customers and consumers as another key piece to their value puzzle. Managing commitments to ESG is a core part of the strategy to reach new customers, grow the market and build brand value. It is also a way for companies to connect with their employees, who increasingly want to work for organizations with a strong mission.

Finally, organizations are grappling with the evolving nature of today's digital reality, making digital resilience critical. As technological innovations advance, so too do the cyber-related risks to both digital and physical company assets, and data-related opportunities to enhance brand and asset value. To manage this duality, companies can create a holistic technological resilience plan in order to capitalize on opportunities and mitigate potential risks.

As evidenced by the recent past, economic, financial and climatic shocks are becoming more frequent and intense. The truly resilient organizations are watching and preparing for trends, opportunities and risks in order to stand the test of time.

Appendix

Survey methodology

The data in this report are supported by a survey conducted by Economist Impact and sponsored by Dataminr among 600 executives with influence over their organizations' security strategy. The survey was fielded in local languages in the US, Canada, the UK, Ireland, Denmark, Sweden, Finland, Norway, France, Germany, Switzerland, Austria, Spain, Italy, Belgium, the Netherlands, Australia, Singapore, New Zealand and Japan between December 2022 and January 2023. Respondents represent organizations across the retail, pharmaceuticals, technology, financial services, energy and utilities, and manufacturing industries. They work in the IT, security, public safety, operations/analytics, facilities management, and communications/brand functions. Results are statistically significant at the 95% confidence interval.

Overall, responses reflect a prevailing sense of optimism about organizations' abilities to prepare for a shifting external environment. Evidence from the current literature supports a tendency in research for respondents to overstate their capabilities, particularly when given the task of assessing a set of external factors with which they feel they are already familiar or which they believe they are already managing successfully. When presented with tangible, ongoing events such as pandemics and economic instability—despite their potential negative impacts—this bias towards overconfidence becomes even more pronounced.

Types of Resilience[14]

Financial Resilience: Ensuring a strong balance sheet, liquidity, and the ability to balance short- and longer-term financial goals

Operational Resilience: Ensuring production capacity, supply chains and distribution networks are protected and adaptable to changing circumstances

Technological Resilience: Safeguarding an organization's data, complying with data localization requirements, and protecting its IT/OT systems and digital assets

Organizational Resilience: Maintaining a strong company culture through inclusive governance structures, open communication, and internal initiatives to make employees feel connected and engaged

Reputational Resilience: Strong alignment between an organization's values and its words and actions

Business Model Resilience: Adapting the organization's business model to material changes in demand, competitors, technology and regulations

Physical Resilience/Security: Safeguarding an organization's people and protecting its facilities, locations and other physical assets

[14] McKinsey. McKinsey on risk. 2022. Available from: https://www.mckinsey.com/~/media/mckinsey/business%20functions/risk/our%20insights/mckinsey%20on%20risk%20number%2013/mckinsey%20on%20risk%20number%2013.pdf

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