

In collaboration with
McKinsey & Company



Resilience Pulse Check: Harnessing Collaboration to Navigate a Volatile World

WHITE PAPER
JANUARY 2025

Contents

Foreword	3
Executive summary	4
1 The need for a more integrative approach to resilience	5
1.1 Growing complexity and interconnectedness of risks	5
1.2 Preparing for the future in a high-stakes environment	6
1.3 Making resilience a core component of long term strategic thinking	8
2 Resilience journey pulse check	9
2.1 The private-sector resilience framework	9
2.2 Gaps in resilience preparedness	10
2.3 Balancing priorities	11
2.4 Building resilience leadership within the organizational dimension	14
2.5 Adapting capabilities at all levels	15
3 Accelerating resilience efforts through public- and private-sector collaboration	17
3.1 Enhancing access to capital	19
3.2 Cultivating macroeconomic stability	20
3.3 Accelerating green growth and scaling up sustainable investments	20
3.4 Adapting human capital to technological disruption	21
Conclusion	23
Appendix	24
Contributors	25
Endnotes	26

Disclaimer

This document is published by the World Economic Forum as a contribution to a project, insight area or interaction. The findings, interpretations and conclusions expressed herein are a result of a collaborative process facilitated and endorsed by the World Economic Forum but whose results do not necessarily represent the views of the World Economic Forum, nor the entirety of its Members, Partners or other stakeholders.

© 2025 World Economic Forum. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, including photocopying and recording, or by any information storage and retrieval system.

Foreword



Børge Brende
President and CEO,
World Economic Forum



Bob Sternfels
Global Managing Partner,
McKinsey & Company

The art of sailing is not in controlling the wind but in skilfully adjusting the sails to navigate through the storm. In a world shaped by accelerating change, resilience has emerged as the key capability essential for both survival and success. Today's leaders are increasingly seeing that resilience is not just about enduring crises, but thriving in the face of them.

Since its inception in 2022, the Resilience Consortium has acted as a catalyst for public- and private-sector efforts to strengthen resilience. As global leaders navigate a landscape of compounding risks (from climate instability and geopolitical conflicts to supply chain fragility and technological disruptions), the Consortium's mission grows only more significant. Through coordinated actions, the Consortium has sought to boost resilience-building across industries, sectors and regions.

This paper is a continuation of this goal. Drawing insights from a survey of over 250 private-sector leaders, it aims to assess where companies currently stand in their resilience journeys. It additionally evaluates companies' preparedness and action in the face of mounting challenges. While an increasing number of companies are

acknowledging the need for resilience in their core strategies, many still struggle to translate that awareness into tangible capabilities. Strikingly, 84% of companies report being underprepared for current trends and uncertainties.

A resilient approach relies on both defensive and offensive strategies. Yet, our findings reveal a predominant focus on short-term actions, reflecting a tendency towards defensive measures over proactive ones.

Building on survey insights, this paper explores the foundations of resilient leadership and underscores the importance of public-private collaboration in advancing resilience. The key focus areas identified include: improving access to capital, cultivating macroeconomic stability, driving sustainable investments and green growth, and preparing the workforce for technological advancements.

We express our gratitude to the Consortium members and Forum initiative leaders for their invaluable contributions. Their insights have been instrumental in shaping this paper, and we hope it serves as a guide and inspiration for leaders intending to advance their resilience strategies.

Executive summary

Companies feel unprepared to face rising threats and uncertainties.

As volatility and compounding risks rise, leaders are learning firsthand that the ability to navigate and adapt continuously to complex macroeconomic and geopolitical dynamics is crucial for shaping resilient strategies. To build resilient strategies, organizations are channelling greater investments into proactive future preparedness (or “offence moves”). This report examines how companies are navigating today's resilience challenges based on insights from a global survey of over 250 private-sector leaders across industries and regions. It reveals the state of resilience in the private sector, uncovers key gaps in readiness and offers actionable recommendations for promoting collaboration in resilience-building efforts.

Organizations face an unprecedented risk landscape, with technology (cybersecurity, artificial intelligence), regulatory changes, shifting market dynamics and macroeconomic factors (inflation, trade policies) emerging as the top concerns. As stakes rise, organizations are increasingly urged to improve investment risk management with greater accuracy and foresight. Resilience must become a central element of long-term strategic planning rather than being treated as a standalone issue – yet only 13% of companies currently incorporate resilience KPIs (key performance indicators) comprehensively into their strategies.

While resilience awareness is growing, 84% of companies report feeling underprepared for current and future disruptions. Many organizations remain focused on addressing immediate needs, favouring short-term defensive actions over forward-looking strategies. Across industries, resilience efforts tend to prioritize financial and digital strategies, often at the expense of foundational capabilities like foresight and disruption readiness. This imbalance creates vulnerabilities that could hinder organizations' ability to navigate prolonged uncertainty.

Leadership plays a pivotal role in building resilience, and it must be strengthened at every level. Boards must embrace diverse perspectives to drive

balanced decision-making. Companies need to enhance decision-making speed through forward-thinking scenario planning. Teams require trust, autonomy and psychological safety to thrive under pressure. At the individual level, leaders must model resilience, inspire their teams and address challenges like burnout and shifting workplace expectations.

As companies concentrate on addressing immediate risks, long-term resilience often takes a back seat, revealing a critical gap in sustained preparedness. This gap presents an opportunity for the public sector and international organizations to step in and support efforts to build enduring resilience. Collaborative initiatives can tackle key challenges, focusing on themes such as:

- **Access to capital:** Using public funds to attract private investment, addressing barriers like perceived risks, high capital costs and currency volatility
- **Macroeconomic stability:** Promoting a supportive environment for private-sector growth through policy dialogue, long-term investments and fiscal health improvements
- **Sustainable investments:** Encouraging green growth and the energy transition by incentivizing sustainable practices and behaviours
- **Workforce preparedness:** Equipping the workforce with skills for technological and workplace changes to reduce skill gaps and support long-term growth

Resilience-building requires unified leadership from chief executive officers, boards and policy-makers. Effectively addressing these challenges depends on collective efforts to mobilize resources, harness expertise and encourage innovation at scale. By working together, stakeholders ensure that resilience becomes a foundation for thriving in an increasingly complex and interconnected world.

The need for a more integrated approach to resilience

Amid rising volatility and compounding risks, organizations face higher-stakes decisions, necessitating a strategic, integrated approach to resilience.



As we learned over the past few years, we operate in a world in which we must expect the unexpected.

Kristalina Georgieva, Managing Director, International Monetary Fund (IMF)

In today's interconnected landscape, organizations are grappling with increasingly complex, compounding risks, driven by the convergence of geopolitical tensions, societal instability, climate change and technological vulnerabilities. These risks take various forms. For instance, the 2024 CrowdStrike outage caused significant global

disruptions in technology, while soaring inflation throughout 2022 to 2024 led to widespread financial instability. On the geopolitical front, escalating trade tensions between the US and China have forced organizations to rethink and diversify their supply chains to mitigate exposure to global uncertainties.

1.1 Growing complexity and interconnectedness of risks

The top 10 short-term risks identified by the *Global Risks Report 2025*¹ align closely with geopolitical, environmental, societal and technological themes. Geopolitical concerns, including interstate armed conflict and geoeconomic confrontation, are especially prominent in the one-year risks ranking. Societal risks, including polarization, lack of economic opportunity, unemployment and concerns around human rights and civic freedoms are also among the top 10 risks identified. Environmental risks, such as extreme weather events or critical change to Earth systems, emphasize the urgent need to develop sustainable practices and resilient economies and societies. Meanwhile, misinformation and disinformation represent the leading technological risks.

The survey of private-sector leaders conducted for this paper reveals that not all risks are viewed as equally disruptive to business operations. Over 250 global executives identified technology as the top threat to business continuity. This trend is being

fuelled by growing cybersecurity concerns and the rapid adoption of generative artificial intelligence (AI). Regulatory changes emerged as the second most disruptive challenge, particularly due to rising compliance costs associated with data protection and environmental regulations. Shifting market dynamics and evolving customer preferences ranked third. This was followed by macroeconomic and capital issues such as exchange rate volatility, changing trade policies and inflation, which are significantly affecting long-term investments and business operations.

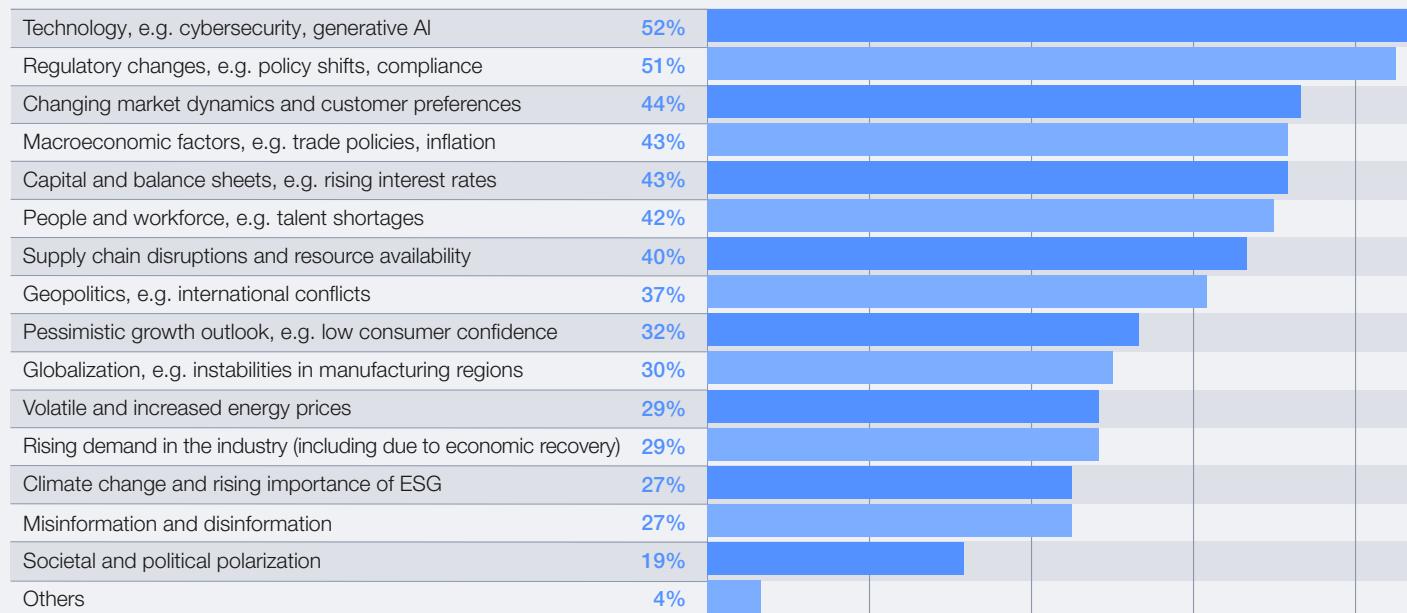
Overall, this global anticipation of disruption across regulatory, technological and macroeconomic vectors reflects a rapidly evolving business landscape shaped by digital transformation and shifting policy environments. The fact that these have been identified as being among the most urgent risks underscores the growing complexity and interconnectedness of global operations.

FIGURE 1 | Overview of most impactful threats

Trends expected to be a major or severe disruption for organizations

 Reference survey question:
Which of the current trends or uncertainties do you think will impact your organization the most?

Share of respondents indicating that a given threat will create major or severe disruption for their organization



1.2 Preparing for the future in a high-stakes environment



We need to address resilience at the company and country level.

Odile Renaud-Basso, President, European Bank for Reconstruction and Development (EBRD)

Amid this volatility, leaders are learning firsthand that an ability to adapt continuously and build resilience is essential. Sectors like energy, automotive and technology will need to rethink their business models entirely to remain future-proofed and withstand emerging disruptions. In response to this, select companies have begun to take a more “offensive” (rather than “defensive”) approach and are now dedicating greater investments to prepare for the future. This is especially true in industries undergoing transformation, as illustrated by the following examples:

- In technology, generative AI is experiencing accelerated adoption. The share of organizations that have adopted generative AI in at least one business function nearly doubled from 33% to 65% between 2023 and early 2024,² and is forecasted to further advance over the coming years. By 2030, \$500 billion is expected to be spent on generative AI globally across the stack (e.g. software layers, technologies or operational components).³

- In the automotive sector, significant funding is being allocated towards the electrification of the industry. For example, the automotive industry is spending over \$1.2 trillion in electric vehicles and batteries through 2030.⁴
- Energy companies are currently investing around \$500 billion annually in renewable energy projects, energy efficiency measures and carbon capture and storage technologies. While green technologies accounted for only around 25% of total investments in 2015, power renewables and decarbonization technologies are projected to make up around 60%-80% of total investments by 2040.⁵
- Across industries, US and European companies are investing heavily to reshape their supply chains in response to geopolitical risks. US companies are primarily reducing dependence on China. For instance, Apple and its suppliers have invested \$16 billion since 2018 to diversify production beyond China.⁶ Meanwhile, European

companies are looking to adjust their supply chains, mainly due to disruptions linked to Russia and China. They are additionally shifting more of their operations and investments towards the US market to create a more balanced global presence. For instance, Volkswagen announced that it will invest \$7 billion in new investments in the US by 2027,⁷ while US tech companies are expanding in Europe to diversify and strengthen their presence.

From funding the energy transition and deploying new technologies to revamping supply chains for greater agility and resilience, companies are

investing heavily in addressing today's pressing challenges. Collectively, these efforts translate into a substantial rise in capital expenditures, as companies strive to future-proof their operations and build long-term stability in the face of mounting uncertainties. Over the period 2003 to 2023, the ratio of capital expenditure to earning before interests and taxes (normalized and adjusted for inflation) for public companies in majorly disrupted industries (especially technology and energy) grew significantly – between 3-12% compound annual growth rate.



Resilience is mostly about adaptation rather than risk mitigation.

Ambroise Fayolle, Vice-President, European Investment Bank (EIB)

Public-sector support has been vital for maximizing the impact of private-sector investments in future-proofing key sectors. Strategic government actions, including policy frameworks, subsidies and investment in critical infrastructure, create the necessary conditions for private capital to flow and thrive. This support accelerates the adoption of sustainable innovations, maximizing the long-term impact of private-sector initiatives and driving systemic transformation across industries. Here are a few examples from stakeholders closely engaged in the Resilience Consortium's work:

- Egypt is taking significant steps to future-proof its economy through the ambitious Nexus of Water, Food, and Energy (NWFE) programme, designed to strengthen the country's resilience against climate impacts while promoting sustainable growth. Via an innovative financing scheme that blends public, private and international capital, Egypt has successfully unlocked \$14.7 billion in funds allocated to projects. This sum is expected to be allocated in projects focused on renewable energy, sustainable agriculture and efficient water management.⁸

- Saudi Arabia aims to reach net zero by 2060.⁹ This ambition is supported by significant energy transition investments. One target put forward is to generate 50% of the country's energy supply from renewable sources by 2030. Additionally, clean energy is expected to receive \$235 billion in public funding to help boost the transition already initiated by the private sector.¹⁰

- Nigeria is cultivating resilient, diversified and inclusive agriculture-based livelihoods by improving governance for disaster risk management, adopting data-driven agricultural interventions and promoting sustainable, climate-smart farming practices. These efforts aim to address food insecurity, enhance productivity and protect vulnerable populations from recurrent shocks like conflict and climate change. The strategy relies on local capacity building, early warning systems and inclusive support to ensure that agricultural communities can better withstand future disruptions and grow sustainably.¹¹

1.3 | Making resilience a core component of long term strategic thinking

As the stakes for both the public and private sectors continue to rise, organizations need to shift their focus towards managing investment risks with greater precision and foresight. This involves a careful reassessment of assumptions to ensure their accuracy, and a closer examination of decision-making processes to gauge long-term impacts. Granularity, stage-gate processes (or phased review processes) and adaptability are emerging as key approaches in this shift. Granularity enables organizations to break down complex strategies into smaller, more manageable parts, providing a clearer view of risks and opportunities. Stage-gate processes facilitate periodic evaluations at key decision points (enabling decision-makers to evaluate investments against criteria and decide whether to proceed, adjust or stop), ensuring flexibility and minimizing exposure to unforeseen risks. Adaptability, meanwhile, ensures that companies remain agile and can pivot their strategies in response to evolving market conditions or disruptions. By integrating these methods, organizations can not only mitigate risks more effectively but also position themselves for sustainable growth in an increasingly uncertain world.

Resilience should not be treated as an isolated concern – rather, it needs to become a core component of long-term strategic thinking. In practice, however, this is the exception rather than the norm today. According to the survey, resilience-related KPIs are only partially integrated into strategy for 55% of companies, and nearly 20% of respondents do not integrate them at all. This lack of strategic alignment suggests that resilience is still being treated as a secondary concern rather than a core business priority.

Despite resilience being frequently treated as a secondary concern, some companies stand out as exemplary models prioritizing future-proofing by actively embedding resilience into their broader strategies. These companies prioritize a proactive, offensive approach over reactive, defensive measures. IKEA exemplifies this by continually incorporating sustainability into its strategic vision as a core enabler of resilience (rather than treating it as a separate, standalone objective).

CASE STUDY

IKEA's circular vision – building a resilient supply chain

Circularity impacts every aspect of IKEA's operations – from designing products with circular capabilities and responsibly sourcing materials to redefining how they engage with customers and beyond. IKEA is committed to reducing reliance on virgin resources, driven not only by environmental considerations but also by the need to build a resilient supply chain. This approach helps lower long-term costs, ensuring affordability for future generations while securing the availability of secondary raw materials.

A standout example is IKEA's commitment to more sustainable mattress production. With annual sales exceeding 12.4 million units, the company recognizes both its responsibility and its opportunity to innovate in mattress design and end-of-life disposal. Guided by IKEA's circular design principles, the company is redesigning mattresses to facilitate recycling and aims to

integrate at least 20% recycled polyurethane foam by 2025.

To strengthen its recycling capabilities and secure access to secondary raw materials, IKEA has invested as a minority stakeholder in RetourMatras. In 2023, RetourMatras dismantled over 1 million mattresses, preventing more than 76 million kilograms of CO₂ emissions compared to incineration. This initiative also recovered approximately 16 million kilograms of materials for reuse, effectively replacing fossil-based alternatives.

This systemic approach not only mitigates the risk of resource scarcity and allows IKEA to adapt to evolving regulations but also drives growth and differentiation, solidifying IKEA's position as a leader in the competitive marketplace.

Source: IKEA. (n.d.). *A circular IKEA – making the things we love last longer*; consultations with IKEA.

Despite increased investment and efforts to embed resilience into strategic planning, many companies still perceive significant gaps in their ability to effectively navigate uncertainties and emerging threats. The following section delves into the current state of resilience preparedness, examining where companies stand in their resilience journeys and identifying opportunities to strengthen their resilience leadership capabilities.

Resilience journey pulse check

The majority of companies feel they could be better prepared for the trends and uncertainties of the road ahead.

2.1 | The private sector resilience framework

FIGURE 2 Private sector resilience framework



Source: World Economic Forum. (2023). *Seizing the Momentum to Build Resilience for a Future of Sustainable Inclusive Growth*.

The Private Sector Resilience Framework, introduced in a former publication, *Seizing the Momentum to Build Resilience for a Future of Sustainable Inclusive Growth*, is an integrated and strategic model designed to strengthen a company's capacity to endure, adapt and excel in the face of disruptions. It consists of **six resilience dimensions** and **four resilience capabilities**.

The resilience dimensions – financial, operational, market position and demand, societal alignment and purpose, digital and technological, and organizational – represent the key areas where resilience needs to be embedded. Each dimension addresses a distinct aspect of business stability, adaptability and alignment alongside external and internal pressures to promote resilience integration across an organization's foundation.

The capabilities – crisis response, strategic reorientation, foresight and preparation – are the skills and processes that enable an organization to act effectively within each dimension. These capabilities ensure readiness and adaptability by enabling companies to respond to crises, reorient strategies in response to shifts, anticipate future challenges and prepare systematically for potential disruptions.

Together, this set of dimensions and capabilities forms a cohesive framework, offering a holistic approach that is not only agile and forward-thinking, but also adept at transforming crises into opportunities. The accompanying survey applies this framework to assess companies' readiness as well as the concrete measures they have implemented related to these dimensions and capabilities.

2.2 Gaps in resilience preparedness

Despite heightened awareness and increased efforts to build resilience, many companies still feel ill-equipped to handle current trends and uncertainties. According to the survey, 84% of companies feel that they could be better prepared for future disruptions related to the resilience dimensions. Interestingly, companies feel even less prepared in their resilience capabilities, with 90% stating they could be better prepared.

Industry-specific insights reveal further gaps. The financial, energy, media and multi-industry sectors report feeling more prepared across resilience dimensions. This is likely due to the robust systems and strategies these industries already have in place, informed by past crises such as the 2008 Financial Crisis or the more recent post-pandemic energy crisis. On the other hand, sectors like agriculture, logistics, manufacturing, healthcare and retail show lower levels of preparedness, revealing vulnerabilities tied to their reliance on physical assets, supply chains and workforce stability. This is especially true for the **digital and technology dimension**, which shows the greatest preparedness variance, reflecting uneven technological readiness across industries.

Detailed findings on the dimensions reveal that, overall, respondents feel most confident in their **financial resilience**, with 25% considering themselves well-prepared, reflecting strong financial management and adaptability across sectors in economic downturns. This is closely followed by confidence in their **digital capabilities and market positioning**, suggesting that companies are harnessing technology and maintaining a competitive edge in a dynamic market landscape. The lower levels of preparedness in **organizational resilience, disruption readiness** and **foresight capabilities**, however, indicates potential vulnerabilities in response to unexpected disruptions and long-term strategic shifts.

These findings highlight that companies feel most prepared in the dimensions they expect to be most affected by current disruptions (financial, digital and market position), reflecting a widespread prioritization of short-term risks. This suggests that companies are placing a strategic emphasis on mitigating immediate business concerns while neglecting crucial long-term risk management. To avoid this, it is essential to build adaptable resilience capabilities and comprehensively address all dimensions in tandem.

FIGURE 3

Level of preparedness along the companies' resilience dimensions

Share of respondents feeling "well" or "somewhat" prepared in the different resilience dimensions

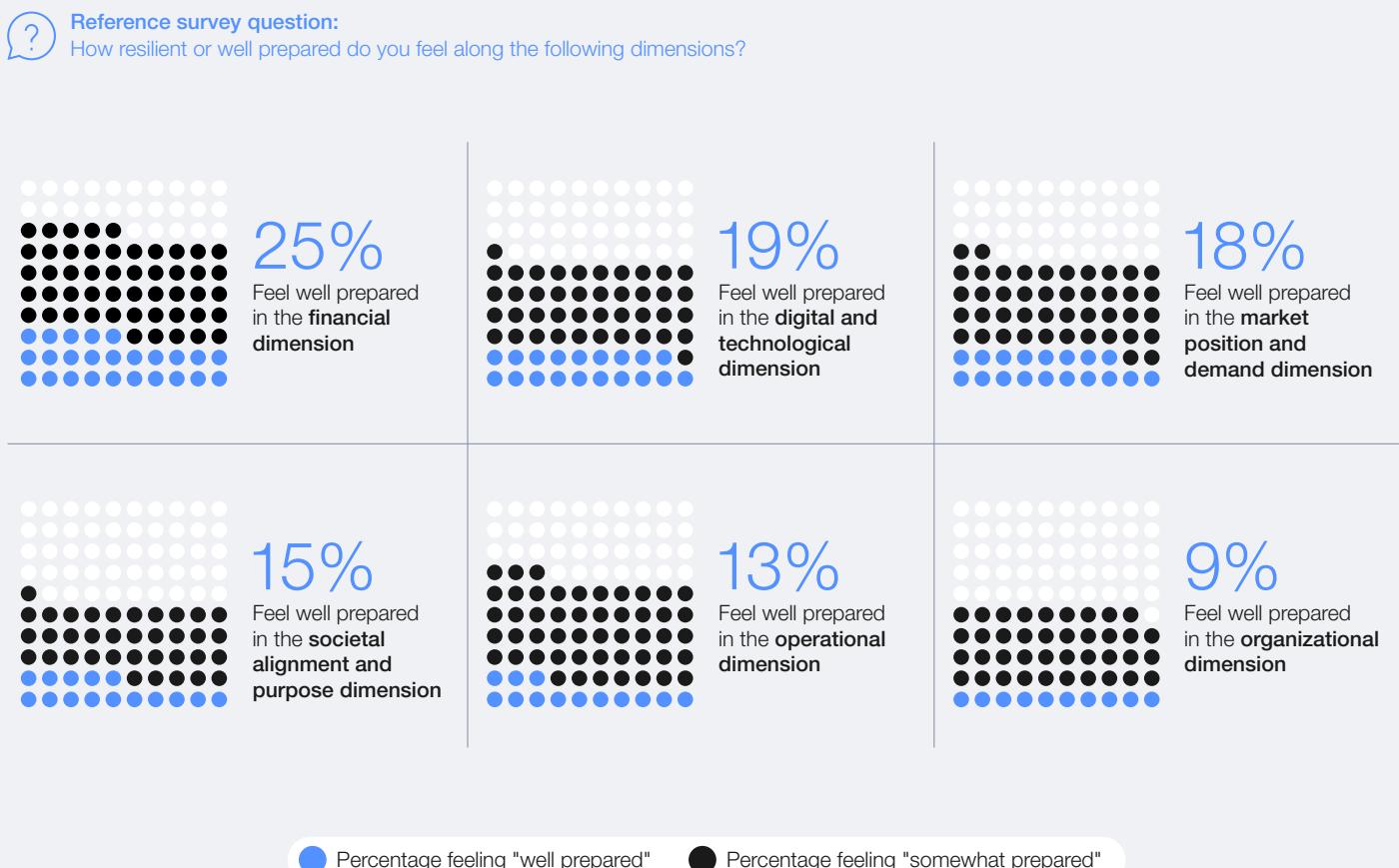
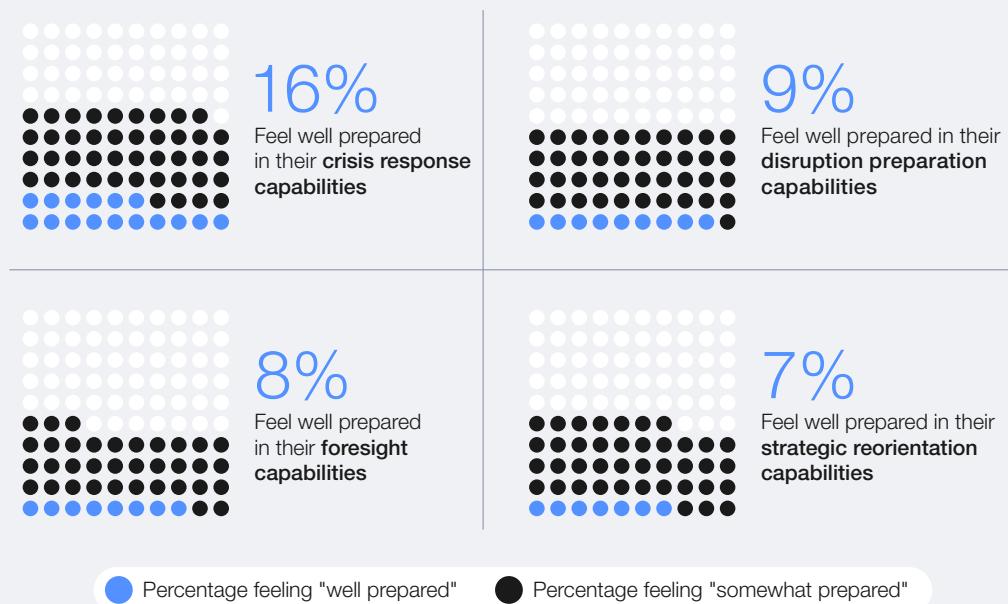


FIGURE 4 | Level of preparedness along the companies' resilience capabilities

Share of respondents feeling "well" or "somewhat" prepared in the different resilience capabilities

 Reference survey question:
How resilient or well prepared do you feel along the following capabilities?



We shouldn't wait for a shock to act... If you are going to wait that a shock just goes away, you're not going to be prepared.

Mohammed Al-Jadaan, Finance Minister, Saudi Arabia

2.3 | Balancing priorities

Strategic dimensions are prioritized over capability building, hindering resilience

Building on insights on companies' perceived preparedness, the following section delves deeper into the actual strategies and actions being undertaken to strengthen resilience. It provides a comprehensive view of where companies currently stand in their resilience journeys and presents an analysis of the specific actions prioritized within each resilience dimension and capability.

Today, resilience efforts are heavily skewed towards dimensions like **financial**, **digital** and **market position resilience**, reflecting where companies feel most prepared and where they perceive most short-term risks to be. This focus has resulted in a significant de-prioritization of resilience capabilities such as **crisis**

response, strategic reorientation, foresight and preparation. This lack of emphasis on foundational capacities means companies may lack the agility to anticipate and adapt to emerging disruptions, leaving them vulnerable to unexpected challenges that could destabilize operations, hinder strategic pivots and ultimately impact long-term sustainability.

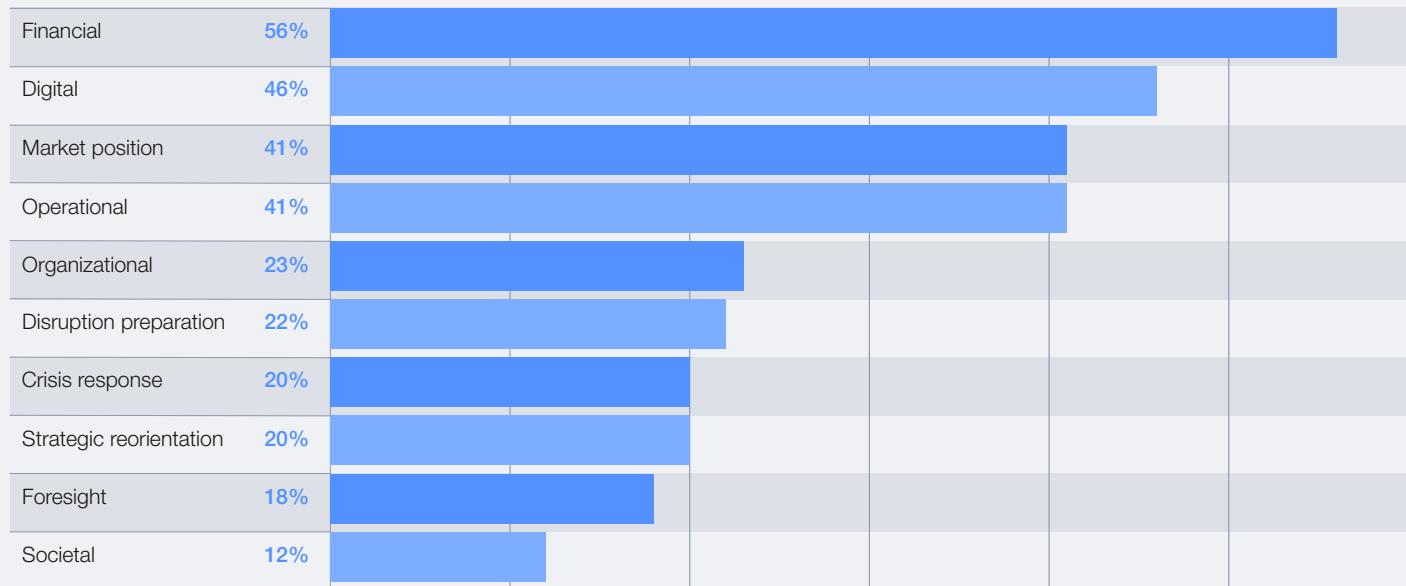
Societal alignment and purpose appears to be the dimension most overlooked by companies, despite its growing significance in a world increasingly influenced by social and environmental pressures. According to the *Global Risks Report 2025*,¹² seven of the top ten long-term risks are tied to these issues, signalling the urgent need for organizations to prioritize the societal and environmental dimensions and ensure long-term resilience. By deprioritizing this area, companies may fail to build the capacities needed to address these challenges, which could leave them vulnerable to future disruptions.

FIGURE 5 | Resilience dimensions and capabilities most prioritized

Resilience dimensions and capabilities most prioritized by executives

 Reference survey question:
Which of the following resilience dimensions and capabilities do you consider a priority for your organization?

Share of respondents rating the resilience dimensions and capabilities among the top three to prioritize



Companies are focusing on short-term actions

The findings suggest that companies are largely addressing immediate resilience needs but are less equipped to manage future, systemic disruptions. Indeed, survey results reveal that companies are making progress in certain aspects of resilience-building, but significant gaps remain, particularly in long-term adaptability and proactive risk management.

In high-priority dimensions like **financial resilience** and **digital resilience**, the focus is on short-term actions such as cost controls, working capital management and data security. These actions are centred around stability and efficiency in response to present challenges, emphasizing measurable outcomes and data-driven insights. Meanwhile, forward-looking actions such as scenario planning, agile strategic processes and risk simulations – which are crucial for navigating future uncertainties – are not systematically applied.

A similar approach is seen for the **resilience capabilities**, with companies prioritizing business continuity actions over long-term transformation programmes and strategic foresight. Even in

societal alignment and purpose, companies are adopting broad environmental and social governance practices but lack concrete long-term-oriented commitments (for instance, on inclusivity and living wages). If they fail to address this imbalance, organizations may not be able to build lasting trust, enhance workforce stability or sufficiently align themselves with evolving societal values.

A notable shift is emerging in **operational resilience** – companies are moving beyond reactive measures towards strategic actions such as automation and supply chains restructuring. This reflects a broader pivot from short-term cost control to long-term resilience building within this dimension, as companies prioritize structural changes that strengthen the core of their operations.

Past publications have consistently emphasized the importance of balancing short-term actions with long-term strategic investments in resilience, whether through financial buffers, societal commitments or innovative adaptability. Companies should focus on closing these gaps by cultivating foresight capabilities, prioritizing societal resilience and preparing for long-term challenges (or risk being caught off guard by future disruptions).

FIGURE 6 | Prioritized resilience actions within the private-sector resilience framework

Resilience actions prioritized are primarily short-term orientated



Note: Prioritized actions refers to the three most prioritized actions by respondents in the survey

Most-prioritized actions by companies in response to current trends and uncertainties

Resilience dimensions

Financial resilience

- Implement tight cost controls (73%)
- Improve working capital and cash conversion (62%)
- Achieve pricing excellence and implement margin management (61%)

Operational resilience

- Apply automation to enhance the resilience of the operations (66%)
- Review sourcing strategies (64%)
- Improve inventory management (56%)

Market position and demand resilience

- Seek strategic alliances (59%)
- Reassess existing portfolio (58%)
- Continuously evolve and improve customer journeys (58%)

Organizational resilience

- Retain workforce (63%)
- Ensure leadership resilience (60%)
- Attract workforce (56%)

Digital and technological resilience

- Improve cybersecurity, information security and data protection (77%)
- Improve data quality and availability (70%)
- Review core tech infrastructure (64%)

Societal alignment and purpose

- Integrate sustainable practices across organization (48%)
- Implement robust ESG reporting frameworks (47%)
- Establish mechanisms for stakeholders engagement in corporate governance (45%)

Resilience capabilities

Foresight capabilities

- Enhance data collection and analysis capabilities (56%)
- Conduct regular scenario analyses and stress-testing (44%)
- Invest in data analytics tools and integrate them into strategic planning (42%)

Disruption preparation capabilities

- Establish KPIs to track progress against resilience objectives (59%)
- Define responsibilities at executive level for disruption preparation (58%)

Crisis response capabilities

- Develop business continuity plans in the event of crises (71%)
- Develop plans for rapidly scaling up response efforts in a crisis (51%)

Strategic reorientation capabilities

- Set, monitor and evaluate KPIs to track strategic reorientation efforts (63%)
- Implement continuous improvement practices (55%)

Action with shorter-term focus Action with longer-term focus

2.4 Building resilience leadership within the organizational dimension

The **organizational dimension** – covering agility, talent access, workforce churn and role clarity – is crucial for resilience, but remains the dimension where companies feel least prepared, despite moderate prioritization. This gap underscores the need to strengthen resilience leadership within organizations. Resilience leadership involves guiding teams through uncertainty with adaptability, foresight and a focus on sustainable growth. In the organizational dimension, resilience leadership can support a culture that embraces change, promotes continuous learning and empowers employees. This, in turn, enhances cohesion, reduces turnover and enables agile responses to market shifts, reinforcing long-term stability and growth.

Cultivating organizational resilience has been increasingly challenging due to recent technological and workforce disruptions. By 2030, over 30% of EU workers will need to upskill or reskill due to automation, while evolving societal expectations – especially among Gen Z – are creating a mismatch in workplace priorities. Additionally, lingering effects of the pandemic have led to widespread burnout, with a McKinsey survey showing that one in four employees globally reported burnout symptoms in 2022.¹³

Lack of resilience leadership in the **organizational dimension** can be identified through key symptoms across four levels: board, company, team and individual.



Board-level symptoms

At the board level, decision-making is often delayed due to prolonged discussions and overly cautious approaches, reducing agility in

responses to emerging challenges. This problem is compounded by limited foresight, insufficient proactive risk monitoring and inadequate focus on talent and succession planning, which undermines leadership stability during transitions.^{14,15}



Company-level symptoms

At the company level, innovation and creative thinking are hindered by ambiguity in strategy and roles, escalating employee dissatisfaction and burnout, stalled transformation efforts (due to fatigue and resistance), and slow, bureaucratic decision-making processes.



Team-level symptoms

At the team level, segregated formation, interpersonal tensions and ineffective debates weaken cohesion, while an excessive focus on tasks stifles collective learning. Feelings of being unvalued or unsafe due to unfair treatment and non-inclusive practices further erode team morale and productivity.



Individual-level symptoms

Individually, employees are experiencing depleted personal energy and focus, leading to feelings of overwhelm, fatigue and burnout. More frequent reactive tendencies, such as control, protection and conformity, coupled with fixed mindsets (e.g. scarcity, victim mentality, win/lose scenarios), limit the capacity for inspiration and creativity.



2.5 | Adapting capabilities at all levels

Building resilience capabilities across all levels of an organization is crucial for managing risks and adapting to disruptions in today's fast-changing environment. By equipping boards, organizations, teams and individuals with the right capabilities, companies can respond more effectively to challenges. Below is a summary of the key resilience capabilities required at each level, including selected insights from the survey:



Board resilience

Resilient boards are essential to organizational success. To build resilience and respond more quickly to crises and opportunities, boards must develop agility by reducing bureaucracy and streamlining decision-making processes. Effective scenario planning and stress-testing also help boards anticipate disruptions, enhancing their capacity to navigate uncertainty with confidence. Another pillar of board resilience is strong talent and succession planning. Resilient boards actively develop leadership pipelines, ensuring continuity when key leaders transition. This approach strengthens the organization's long-term stability. Meanwhile, ensuring diversity in the board facilitates a more varied and innovative exchange of perspectives and ideas, which is critical for balanced decision-making in times of volatility.

Trust between board members and management further fortifies resilience. Boards should demonstrate reliability by consistently delivering clear, actionable guidance. Credibility comes from deep knowledge of the business and emerging risks, while vulnerability – showing openness to learning and admitting gaps – enables honest, productive dialogue with management. By minimizing self-interest and focusing on the collective good, boards can create an environment of trust that enhances organizational adaptability and long-term growth. These capabilities ensure boards are not only reactive in times of crisis but proactive in guiding their organizations towards sustained resilience and success.



Company resilience

Agile organizations prioritize fast, data-driven decisions and flexible outcomes, identifying uncertainties and preparing for disruptions through forward-thinking scenario planning. Traditional forecasts are insufficient, and companies must adopt new methods to stay competitive.

Real-time decision-making through a nerve centre of leaders, alongside effective meetings and time management, ensures swift adaptation to challenges.

Survey results, however, reveal many organizations remain reactive, relying on past lessons rather than proactive strategies like coaching, mentorship and adaptability training (with fewer than 40% implementing these critical methods). To cultivate resilience, organizations must shift focus to leadership development to ensure leaders are prepared for future uncertainties.

Talent management is another key element of resilience. Organizations bridge skill gaps by recruiting diverse talent, emphasizing internal mobility and creating flexible work arrangements. A thriving culture that supports adaptability, resilience and psychological safety is essential for long-term performance. Over 40% of companies, however, communicate their vision and values inconsistently during uncertain times, thereby forgoing opportunities for alignment. For true resilience, companies must integrate proactive leadership, transparent communication and a flexible, outcome-driven culture.



Team resilience

Self-sufficient, accountable teams are vital for resilience. To build resilient teams, leaders should reduce bureaucracy and cultivate an entrepreneurial spirit within cross-functional teams. Resilient organizations promote integration, deploy "tiger teams" to tackle specific challenges and create support systems centred on psychological safety and continuous learning. Recognizing innovation, conducting postmortems and facilitating open feedback further enhance team resilience.

Trust is equally crucial, built through reliability, credibility, vulnerability and minimized self-interest, ensuring actions serve the collective good. This trust promotes collaboration and problem-solving, which are essential for overall resilience. Survey results highlight key gaps, however. For example, less than half of respondents believe their leaders are open to diverse perspectives, limiting inclusive decision-making and stifling innovation. Similarly, only 42% feel empowered to make decisions without micromanagement, reflecting a lack of trust and team autonomy. Meanwhile, just 27% report that decisions are escalated only when necessary, pointing to excessive control and reluctance to delegate authority – both critical barriers to agile, resilient team structures.

To close these gaps, leaders must actively empower teams by embracing diverse viewpoints, delegating decision-making authority and garnering trust. This will enable teams to operate autonomously, adapt swiftly and respond effectively to challenges without excessive oversight or control.



Individual resilience

In today's volatile business environment, personal resilience and adaptability are essential. Leaders and employees must make swift, decisive choices even with incomplete information, as demonstrated during the COVID-19 pandemic when quick strategic pivots helped mitigate risks and highlight new opportunities.

Key attributes like grit, accountability and humility are vital to resilient leadership. Only 46% of leaders, however, are open to different perspectives, limiting innovation and learning. Leaders must also model resilience by leading from the front, which includes engaging with their teams, communicating transparently and solving problems proactively. This invites trust and empowers teams to navigate uncertainty with confidence.

Moreover, leaders who lead from the front embody a leadership philosophy that emphasizes active engagement, visibility and accessibility. In times of uncertainty and crisis, leaders who lead from the front are present and accessible, understanding challenges firsthand and addressing them promptly. They set an example by modelling the behaviours and attitudes they expect from their teams, demonstrating commitment, resilience and a proactive approach. Survey insights, however, indicate that only 39% of leaders quickly adapt to new ways of working, and only 40% experiment with new solutions, leading to insufficient role modelling of the behaviours and attitudes expected from their teams.

While building resilience is the responsibility of every organization, public-sector engagement is essential to enable, support and amplify industry resilience efforts for maximum impact. The public sector plays a pivotal role by establishing supportive policies, driving collaboration and setting long-term national objectives that encourage industries to strive for higher standards. By doing so, it not only strengthens individual organizations but also promotes a more resilient society capable of withstanding disruptions, protecting communities and achieving sustainable growth on a systemic level.

Accelerating resilience efforts through public- and private-sector collaboration

The complementary capabilities of the public and private sectors should be applied in tandem to strengthen long-term resilience.

Long-term resilience is crucial for both companies and governments. As such, strong public-private collaboration is required to address investment gaps and support sustainable growth. Resilience is not only the objective of companies navigating their way through a volatile world. Resilience is also a common thread running through the developmental objectives of governments and societies. Buffeted by the shocks of recent years – from the COVID-19 pandemic to conflict and the impacts of climate change – governments are increasingly cognizant of the importance of investing to build more resilient societies.

These objectives have been central in guiding intergovernmental frameworks shaping the future of the world. From education and health to sustainable development and growth, resilience is a thread running through the 17 Sustainable Development Goals (SDGs) of the United Nations, which set an ambitious agenda to address global challenges by 2030. Similarly, the economic and social transformation envisioned under the Paris Agreement on climate change has resilience at its heart, prioritizing adaptation to the impacts of a changing climate.

For some years, it has been recognized that the societal shifts projected under the SDGs and Paris Agreement will only be achieved through determined action across both the public and private sectors. Bridging the significant investment gaps in developing economies will be crucial. Scaling up access to capital to enable governments to build resilience and achieve their development and climate objectives will depend on coordinated action across sectors.

The upcoming UN Financing for Development conference, scheduled for 2025 in Spain, presents

an opportunity to incorporate the perspectives of the private sector. The private sector plays a vital role in driving investment and development in lower-income and emerging economies, but often faces unique challenges that policy-makers need to understand. Following up on the 2015 Addis Ababa conference, this upcoming conference comes at a pivotal moment with only five years left to achieve the SDGs. This provides an important window for governments to actively engage with private-sector insights and address the barriers that prevent greater investment and development progress.

Building resilient economies requires substantial capital investment and technical expertise that neither the public nor private sector can provide alone. By working effectively together, governments and industry can harness their complementary strengths to address funding gaps, share technical knowledge and drive innovation. This collaboration is mutually beneficial: it generates investment returns for investors while enabling public projects that support long-term resilience.

The Global Investors for Sustainable Development (GISD) Alliance exemplifies this approach in action. This UN-led coalition unites leaders from major financial institutions and corporations to channel private investment towards SDGs through coordinated strategies. While the GISD Alliance demonstrates promising progress, there are still untapped opportunities to deepen public-private collaboration.

The survey conducted for this report reveals that many concerns facing companies today – such as uncertainty surrounding access to capital, macroeconomic stability, energy and technology – should be addressed in collaboration with the public sector.

Governments can help by working to balance the investment climate and by providing clearer regulatory frameworks, which reduce uncertainty.

Stephen Kehoe, Executive Vice-President, Chief Corporate Affairs Officer, PepsiCo

Just 28% of respondents to the Resilience Consortium's survey, however, indicated that their companies engage in public-private partnerships, with interaction in cybersecurity being a notable priority for businesses seeking collaboration with public bodies. The scale of public-private partnerships varies substantially between sectors, with the global energy and materials sector showing the highest level of engagement and the multi-industry sector showing the lowest.

There could be many reasons why a company has not pursued collaboration with the public sector.

In response to the survey, 89% of those interviewed reported challenges in engaging in public-private collaboration, noting regulatory constraints or legal barriers as the main obstacles to effective collaboration. Effective public-private collaboration does not necessarily require formal commitment to financing large-scale investments – rather, it can begin with open dialogue. This enables governments and companies to identify and address key investment areas where both sectors can work together to support long-term resilience.



We need systemic change to move the needle. A lot can be done jointly between the public and private sector. The cost is too high to manage this only from the private side.

Christian Wulff Søndergaard, Vice-President, Global Corporate Affairs, Carlsberg

The Resilience Consortium's *Building a Resilient Tomorrow: Concrete Actions for Global Leaders* report highlights examples of how public-sector engagement can shape conditions that are conducive to resilience in the private sector. While resilience is shaped by numerous context-specific factors,

the survey has highlighted key priority areas and concerns observed by companies across regions. In response, the Consortium offers recommendations for cultivating collaboration between the public and private sectors to drive investments that promote sustainable growth and enhance long-term resilience.



3.1 Enhancing access to capital

The survey reveals that limited access to capital is a significant barrier for companies in all regions, but is particularly acute in Africa, where capital costs are considerably higher than in other regions. This observation comes as no surprise. The cost of borrowing for developing countries is often three times as high as for developed countries.¹⁶ Changing the perception of risk requires a multifaceted response.

Constraints to capital access underscore the important role that the public sector can play in supporting long-term resilience. International financial institutions (IFIs), multilateral development banks (MDBs), development finance institutions (DFIs) and regional development banks (RDBs) are key mechanisms harnessing public funds to attract private-sector investment, including to places where perceived risks crowd out private investors.¹⁷

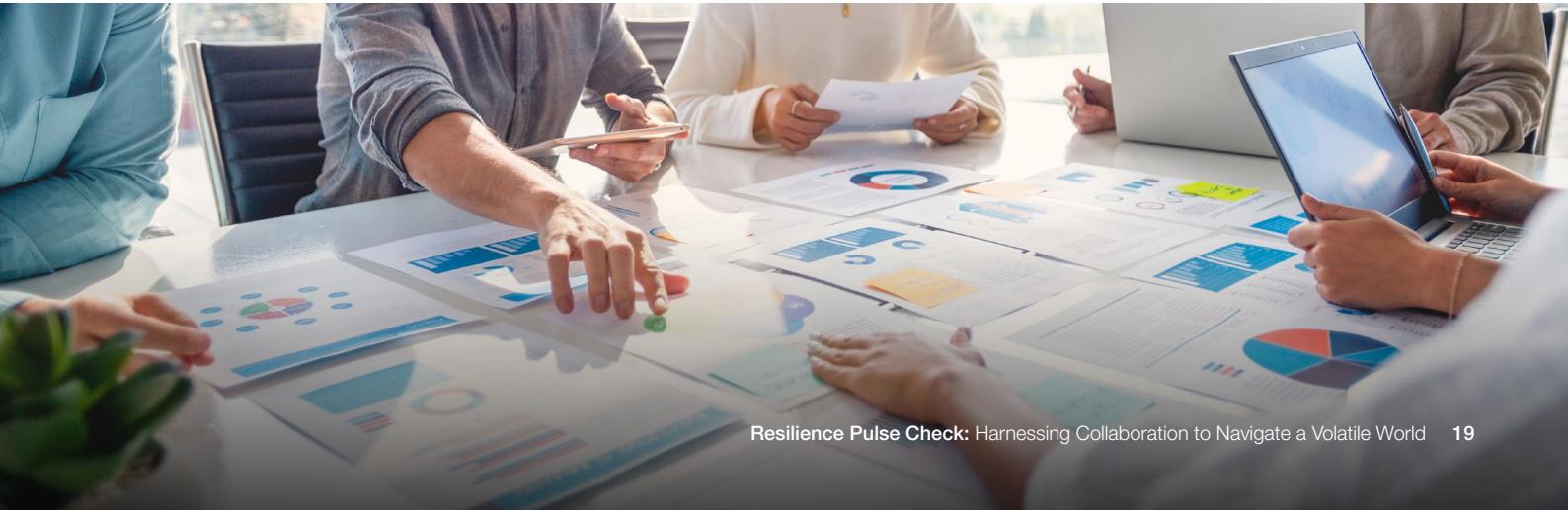
Multistakeholder initiatives integrating the capabilities of organizations from different sectors can facilitate the application of private-sector tools in a wider range of economies. The De-risking, Inclusion, and Value Enhancement of Pastoral Economies in the Horn of Africa (DRIVE) project, implemented by organizations including the World Bank and Swiss Re, aims to facilitate livestock trade and enhance pastoralists' access to financial services for drought risk mitigation. By providing tailored services such as savings incentives, drought index insurance, and digital bank accounts, DRIVE promotes financial inclusion and mobilizes private investment to strengthen livestock value chain resilience against the impacts of drought.¹⁸

Blended finance mechanisms – which combine public and private capital – have the potential to provide a return to investors while ensuring key development projects can be executed. Such mechanisms were a central pillar of the third Financing for Development conference 10 years ago, and will continue to play a key role in global development finance discussions at the fourth Financing for Development conference in 2025. Temasek – a Singaporean state-owned multinational investment organization – and HSBC have partnered to establish the blended

debt-financing platform Pentagreen, in collaboration with the Asian Development Bank and Clifford Capital.¹⁹ The goal of this platform is to invest in sustainable infrastructure projects in Southeast Asia that are marginally bankable, exemplifying the effective application of public-private collaboration to address investment gaps in resilience-building.

Governments and MDBs can further enhance access to capital by offering tailored financial instruments, such as targeted credit lines, to critical sectors that can contribute to a strong economy during times of volatility. The World Bank Group's commitment to boosting annual guarantee issuances to \$20 billion by 2030 is an important contribution to public- and private-sector resilience in emerging economies.²⁰ In 2019, the Central Bank of Egypt launched an initiative to enhance private-sector resilience, providing EGP 100 billion (Egyptian pounds) (approximately \$6.4 billion) in assurances for access to capital in key national sectors including manufacturing and agriculture.²¹ This support, combined with economic reforms from 2016, helped Egypt achieve positive economic growth during the COVID-19 pandemic.

Access to capital for long-term resilience investments is also impacted by currency exchange risk, which can drive up the cost of capital and prevent investments. There is a need for more hedging products tailored to long-term resilience investments. Insurers can play a vital role in risk mitigation by employing advanced risk assessment tools to help both public and private sectors evaluate project viability and attract investment more effectively. Additionally, the MDBs and DFIs might consider scaling up their foreign exchange risk mitigation instruments, which could reduce currency-hedging costs and potentially unlock up to \$1 trillion annually in foreign private investment for green initiatives in emerging economies by 2030.²² Programmes like The Currency Exchange Fund (TCX) can further support access to capital by mitigating currency risk for investors in developing countries and boosting financial resources available for sustainable development, allowing investors to build resilience in unpredictable landscapes.²³



3.2 Cultivating macroeconomic stability

The survey reveals that companies in Africa and Latin America have the greatest concern about macroeconomic stability.

Governments and central banks, with the support of the International Monetary Fund (IMF), have a responsibility to maintain macroeconomic stability. This can be achieved through robust policy-making and strategic investments (which can help to cultivate a favourable environment for the private sector to flourish in). The private sector also has an important role to play in supporting macroeconomic stability by collaborating with government, engaging in open dialogue, helping to shape effective policy and committing to long-term investment.

Industrial policy, which promotes specific sectors, can be an important tool for enhancing long-term resilience and sustainable growth. Nigeria has adopted a resilience-building strategy that focuses on strengthening vital sectors including agriculture, manufacturing and electricity.²⁴ This aims to stabilize prices, enhance food security and reduce import dependency, which can support economic growth during times of uncertainty.

Additionally, scaling innovative resources from MDBs is important for improving economic stability

in emerging economies. These resources should be concessional, long-term and inclusive to ensure that countries have access to affordable finance for key resilience projects. Strengthening the MDBs in line with the G20 Roadmap will increase their lending capacity and make them more agile and effective, increasing their capacity to bridge financing gaps towards climate and development goals.²⁵

Debt swaps are an innovative financing mechanism that allow countries to redirect financial resources towards long-term resilience-building initiatives. By restructuring existing debt obligations with more favourable terms, governments can free up fiscal space to invest in key development projects. In 2024, the Inter-American Development Bank and European Investment Bank approved \$300 million in guarantees for a debt-for-climate operation in Barbados, enabling the country to invest in climate-resilient infrastructure.²⁶ The Paris Club has recognized the importance of debt restructuring in enhancing fiscal sustainability and the Group of 20 (G20) has highlighted innovative financing solutions as important tools for mobilizing resources for tackling climate change.^{27,28} Financial instruments like debt swaps not only strengthen a country's fiscal health but also enhance its investment climate, helping to attract additional private investment for long-term resilience projects.



3.3 Accelerating green growth and scaling up sustainable investments

The survey reveals significant concerns among global companies regarding their preparedness for the transformations required by climate change and energy transitions. African companies are particularly worried about increasing energy prices, while European companies share a heightened concern about the impacts of climate change.

The urgency of climate action for companies and governments is illustrated by projections from the International Labour Organization, which states that under a 1.5°C warming scenario, heat stress could result in the loss of working hours equivalent to 80 million full-time jobs globally by 2030.²⁹ Furthermore, insufficient foresight on and responses to climate change hinder robust

resilience against environmental impacts on businesses, making proactive measures even more crucial. The amount of required climate investment has also increased, with an expected annual need of \$4.5 trillion by 2030, up from \$1.8 trillion in 2023.³⁰

Achieving energy sustainability and security requires collaboration between the public and private sectors. The European Bank for Reconstruction and Development's (EBRD) Green Economy Financing Facility, for example, provides credit lines for green investments, helping companies adopt sustainable practices through technical assistance and targeted investments.³¹

At the same time, examples, including Carlsberg's renewable electricity target, demonstrate another form of public-private collaboration. By setting a goal that all renewable electricity should be procured through power purchase agreements (PPAs), Carlsberg aims to make sure that its operations not only run on renewable energy but that more green power is actually being created. Moving beyond their own operations to address emissions

in their value chain, they are also members of an industry-wide coalition called the REfresh Alliance, which seeks to accelerate renewable energy uptake for suppliers throughout the beverage industry. Government policies and incentives create the enabling environment for renewable energy markets, while private companies like Carlsberg provide the long-term demand certainty that helps renewable energy developers secure financing for new projects. This relationship helps accelerate the green energy transition, as public policy frameworks make renewable PPAs viable, while private sector commitments help achieve clean energy goals.^{32,33}

To accelerate progress, the private sector can integrate climate action into corporate governance and business strategies. The public sector can support these efforts by establishing regulatory frameworks that incentivize clean energy investments, providing tax benefits for green initiatives and promoting public-private partnerships for large-scale green infrastructure projects. This coordinated approach ensures that both sectors' strengths are harnessed for maximum impact in building climate resilience.



3.4 Adapting human capital to technological disruption

The survey highlights that technology and digital disruption are critical challenges faced by companies across regions. Over the next five years, 23% of global jobs will be transformed due to industry changes driven by AI and advancements in text-, image- and voice-processing technologies.³⁴ The scale of this challenge is significant. The World Economic Forum estimates that approximately \$34 billion is needed in the US alone to upskill workers affected by technological change.³⁵ This skills deficit is not merely a financial issue – it poses a substantial barrier to long-term resilience of economies and societies.

To thrive in this evolving landscape, governments must invest in upskilling and the private sector must proactively identify and address skill gaps within the workforce. For example, under its Vision 2030 plan, Saudi Arabia has emphasized the necessity of upskilling and reskilling its workforce to prepare citizens for future job opportunities.³⁶ A key initiative is the Saudi Digital Academy, established in 2019, which offers a variety of training programmes in digital skills, including data science and AI. This initiative will help attract investment and generate new job opportunities in high-growth economic sectors, bolstering resilience and providing individuals with

the necessary skills to succeed in an economy undergoing unprecedented technological shifts.

While Saudi Arabia's approach demonstrates one path forward, countries can adopt various strategies to address technological disruption. Reducing human capital risks associated with technology disruption requires countries to implement upskilling programmes tailored to their specific contexts, supported by investments from both the public and private sectors. This approach could begin with national skills assessments to identify workforce gaps and align training initiatives with strategic economic needs. Alongside this, countries could develop flexible digital learning platforms that provide accessible and adaptable education to a range of learners across sectors and skill levels. These platforms should offer specialized courses designed for continuous professional development, empowering workers to keep pace with rapidly evolving technologies. For example, Nigeria's 2024 Devs in Government project aims to upskill civil servant software developers, enhancing technical capacity, cultivating peer-to-peer learning and improving access to e-government services.³⁷

This paper stresses that the need for public- and private-sector collaboration has never been more

pressing. In the face of mounting global challenges, ranging from access to capital issues and economic instability to climate change and technological disruption, the unique strengths of both sectors can effectively bridge investment gaps. This would help to drive sustainable growth and cultivate an environment in which companies can thrive amid volatility. Insights from the survey and this chapter highlight important areas in which to build long-term resilience, as well as the need for leaders across sectors to prioritize collaboration.

While collaboration will be essential to drive meaningful impact, the achievement of these goals will be largely influenced by the broader macroeconomic and geopolitical landscape. This landscape affects access to capital and the efficient deployment of resources. In an environment of limited resources, both governments and companies face constraints that necessitate a careful approach to prioritization – especially with high levels of national debt and finite corporate resources. Maintaining the capacity to secure capital effectively, even amid volatility, will be crucial for sustaining long-term growth. This is particularly important, as the survey indicates a corporate tendency to focus on short-term measures, underscoring the need for long-term thinking on resilience.

Conclusion

In today's increasingly unpredictable world, organizations are faced with compounding risks that demand a more integrated and forward-thinking approach to resilience. Despite growing awareness, a significant gap remains, with many companies feeling underprepared – particularly in terms of long-term adaptability and proactive risk management. This gap is evident in both their short-term actions, which often overshadow the development of foundational resilience capabilities, and in their strategic focus, which tends to prioritize immediate business needs over building long-term organizational strength. Achieving long-term resilience requires support from leadership at all levels, with an emphasis on agility, scenario planning and harnessing a culture of innovation.

The collaboration between the public and private sectors has an important role in supporting long-term resilience. This white paper has assessed

potential opportunities for enhancing collaboration between government and industry (with a special focus on improving macroeconomic stability and access to capital, accelerating green growth investments and adapting human capital to technological disruptions).

Looking ahead, the path to long-term resilience is a shared responsibility that requires leadership and vision at all levels. The success of these initiatives depends on the leadership of chief executive officers and country heads, and their commitment to driving these transformations. By embedding resilience into core strategies, both companies and governments can not only mitigate future risks but also unlock new opportunities for sustainable growth. In a world marked by uncertainty, resilience becomes the foundation of long-term success, enabling organizations to not only withstand disruption but also to thrive amid it.

Appendix

The research methodology combined quantitative and qualitative approaches to gather comprehensive insights from senior executives across various industries and regions. The primary data source was an online survey conducted between June and July 2024. The survey captured responses from 259 executives, representing a wide range of regions, industries, company sizes and functional specialties. Participants' roles ranged from C-level executives to C-2 levels and functional heads. The sample predominantly included publicly listed companies, with the majority generating more than 1\$ billion in annual revenue. The survey was designed to ensure diversified regional representation,

with all regions contributing between 10-20% of the sample, and broad industry coverage, with individual sectors accounting for between 4-14% of the total respondents.

To supplement the survey findings and provide deeper qualitative context, additional in-depth interviews were conducted with selected executives from May to December 2024. These interviews provided valuable firsthand perspectives on key themes and strategic priorities, enriching the quantitative results. The combined data sources offer a robust and balanced view of current trends, challenges and opportunities as seen by global business leaders.

Contributors

World Economic Forum

Mirek Dušek

Managing Director

Andrej Kirn

Head, International Organizations and Humanitarian Agenda

Alexandros Pamnani

Project Lead, Resilience and International Cooperation

James Purcell

Deputy Head, International Organizations and Humanitarian Agenda

McKinsey & Company

Cristina Catania

Senior Partner

Camille Chauvin

Associate

Maria Chtepa

Associate

Teresa Diviu

Client Capabilities Director

Alfonso Natale

Partner

Daniel Pachthod

Senior Partner

Thomas Poppensieker

Senior Partner

Acknowledgements

This paper is based on numerous consultations and inputs from the World Economic Forum and McKinsey & Company colleagues involved in resilience-related initiatives. Sincere thanks are given to all those who contributed their insights via interviews or written contributions, including those not captured here.

Production

Louis Chaplin

Editor, Studio Miko

Laurence Denmark

Creative Director, Studio Miko

Xander Harper

Designer, Studio Miko

Endnotes

1. World Economic Forum. (2025). *Global Risks Report 2025*. <https://www.weforum.org/publications/global-risks-report-2025/>.
2. McKinsey & Company. (2024). *The state of AI in early 2024: Gen AI adoption spikes and starts to generate value*. <https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai>.
3. McKinsey & Company. (2024). *The Role of Telcos in AI - How Telcos Can Play a Meaningful Role in the AI Tech Value Chain* [unpublished].
4. Lienart, P. (2022, October 21). A Reuters analysis of 37 global automakers found that they plan to invest nearly \$1.2 trillion in electric vehicles and batteries through 2030. <https://www.reuters.com/graphics/autos-investment/electric/akpeqgqzqypr/?utm>.
5. McKinsey & Company. (2023). *Global Energy Perspective 2023*. <https://www.mckinsey.com/industries/oil-and-gas/our-insights/global-energy-perspective-2023>.
6. Vietnam Investment Review. (2024). Apple suppliers spend billions diversifying from China. <https://vir.com.vn/apple-suppliers-spend-billions-diversifying-from-china-108143.html#:~:text=As%20a%20result%2C%20Apple%20and,US%2C%20and%20Vietnam%20since%202018>.
7. Lienert, P. (2022). VW targets \$7.1 billion for North America. *Reuters*. <https://www.reuters.com/business/autos-transportation/vw-invest-71-billion-add-25-new-electric-vehicles-north-america-2022-03-21/>.
8. World Economic Forum. (2023). *Egypt's Nexus for Water, Food and Energy programme – the blueprint to fight climate change?* <https://www.weforum.org/agenda/2023/09/egypt-water-food-and-energy-nexus-programme-blueprint-fight-climate-change/>.
9. El-Kogali, S.E.T. & Adeel Abbas, S. (2024). *Embracing climate opportunities for a greener GCC*. World Bank Blogs. <https://blogs.worldbank.org/en/arabvoices/embracing-climate-opportunities-greener-gcc>.
10. Goldman Sachs Energy. (2024). *Only a quarter of Saudi Arabia's \$1 trillion capex plan will go into oil*. <https://www.goldmansachs.com/insights/articles/only-a-quarter-of-saudi-arabias-1-trillion-capex-plan-will-go-into-oil>.
11. Food and Agriculture Organization of the United Nations (FAO). (2021). *The Federal Republic of Nigeria Resilience Strategy 2021-2023*. <https://openknowledge.fao.org/server/api/core/bitstreams/fd1918e9-aafe-47f7-a404-e2f95e7c7891/content>.
12. World Economic Forum. (2025). *Global Risks Report 2025*. [link to be added once published in January 2025].
13. Brassey, J. et al. (2022). *Addressing employee burnout: Are you solving the right problem*. McKinsey & Company. <https://www.mckinsey.com/mhi/our-insights/addressing-employee-burnout-are-you-solving-the-right-problem>.
14. Frithjof, L. (2023). *An interview on building organizational resilience: A board-level priority in today's challenging times*. McKinsey & Company. https://www.mckinsey.com/Capabilities/Risk-and-Resilience/Our-Insights/An-interview-on-building-organizational-resilience-A-board-level-priority-in-todays-challenging-times?sid=soc-POST_ID.
15. Brown, S., Huber, C., Kristensen, I. & Padhi, A. (2022). *The board's role in building resilience*. McKinsey & Company. <https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/the-boards-role-in-building-resilience>.
16. Spiegel, S. & Schwank, O. (2022). *Bridging the 'great finance divide' in developing countries*. Brookings Institution. <https://www.brookings.edu/articles/bridging-the-great-finance-divide-in-developing-countries/#:~:text=In%20the%20low%20interest%20environment,countries%20paying%20over%208%20percent>.
17. World Economic Forum. (2024). *Unlocking climate solutions at scale through blended finance*. <https://www.weforum.org/agenda/2024/09/blended-finance-drive-climate-solutions/>.
18. SwissRe. (n.d.). *Adapting to a changing climate – Build resilience and adapt to the impacts of climate change*. <https://www.swissre.com/our-business/public-sector-solutions/adapting-to-a-changing-climate.html>.
19. Pentagreen. (n.d.). *Catalysing Sustainable Infrastructure Projects, Unlocking Solutions to Combat Climate Change*. <https://www.pentagreen.com/>.
20. World Bank. (2024). *World Bank Group Guarantee Platform Goes Live*. <https://www.worldbank.org/en/news/press-release/2024/07/01/world-bank-group-guarantee-platform-goes-live>.
21. Central Bank of Egypt. (2022). *Central Bank of Egypt's Measures to Offset the Impact of COVID-19*. <https://www.cbe.org.eg/-/media/project/cbe/file/long-context/central-bank-of-egypts-measures-to-offset-the-impact-of-covid19.pdf>.
22. Persaud, A. (2023). *Unblocking the green transformation in developing countries with a partial foreign exchange guarantee*. Climate Policy Initiative. <https://www.climatepolicyinitiative.org/wp-content/uploads/2023/06/An-FX-Guarantee-Mechanism-for-the-Green-Transformation-in-Developing-Countries.pdf>.
23. Hirschhofer, H. & Kapoor, S. (2023). *TCX Squared – Creating Currency Risk Markets to Mitigate Currency Risk at Scale*. Climate Policy Initiative. Climate Policy Initiative. https://www.climatepolicyinitiative.org/wp-content/uploads/2023/06/TCX-Squared_Currency-Risk_2023.pdf.
24. Anyanwu, S. (2024). *Nigeria Showcases Economic Resilience and Leadership at 2024 IMF/WB Spring Meetings*. Federal Ministry of Information and National Orientation of Nigeria. <https://fmino.gov.ng/nigeria-showcases-economic-resilience-and-leadership-at-2024-imf-wb-spring-meetings/>.

25. G20. (2024). G20 Roadmap towards better, bigger and more effective MDBs. <http://www.g20.org/pt-br/sobre-o-g20/trilhas/trilha-de-financas/arquitetura-financeira-internacional/7-g20-roadmap-towards-better-bigger-and-more-effective-mdbs.pdf>.
26. European Investment Bank. (2024). *EIB and Inter-American Development Bank approve guarantees to support climate and fiscal resilience*. <https://www.eib.org/en/press/all/2024-300-inter-american-development-bank-and-european-investment-bank-approve-guarantees-to-support-climate-and-fiscal-resilience-in-barbados>.
27. Club de Paris. (n.d.). *Frequently Asked Questions*. <https://clubdeparis.org/en/communications/page/frequently-asked-questions>.
28. G20. (2023). *G20 New Delhi Leaders' Declaration*. <https://www.consilium.europa.eu/media/66739/g20-new-delhi-leaders-declaration.pdf>.
29. International Labour Organization. (n.d.). *Increase in heat stress predicted to bring productivity loss to an equivalent of 80 million full-time jobs*. <https://www.ilo.org/resource/news/increase-heat-stress-predicted-bring-productivity-loss-equivalent-80>.
30. International Labour Organization. (n.d.). *Scaling up of innovative clean energy technologies needed to achieve net zero emissions targets globally*. [https://www.iea.org/news/scaling-up-of-innovative-clean-energy-technologies-needed-to-achieve-netzero-emissions-targets-globally](https://www.iea.org/news/scaling-up-of-innovative-clean-energy-technologies-needed-to-achieve-net-zero-emissions-targets-globally).
31. Green Economy Financing Facility (GEFF), European Bank for Reconstruction and Development. (n.d.). [description of Green Economy Financing Facility] <https://ebrdgeff.com/about-seff/>.
32. Carlsberg Group. (n.d.). *Pioneering a new model for renewables in the Baltics*. <https://www.carlsberggroup.com/sustainability/case-stories/pioneering-a-new-model-for-renewables-in-the-baltics/>.
33. Better Energy. (2022). *Carlsberg signs large green PPA with Better Energy*. <https://www.betterenergy.com/news/carlsberg-signs-large-green-ppa-with-better-energy/>.
34. World Economic Forum. (2024). *Reskilling Revolution: Preparing 1 billion people for tomorrow's economy*. <https://www.weforum.org/impact/reskilling-revolution-reaching-600-million-people-by-2030/>.
35. World Economic Forum. (2019). *Towards a reskilling revolution: industry led action for the future of work*. http://www3.weforum.org/docs/WEF_Towards_a_Reskilling_Revolution.pdf.
36. Kingdom of Saudi Arabia. (n.d.). *Vision 2030: a story of transformation*. https://www.vision2030.gov.sa/media/qnxn3igg/vision-2030_story-of-transformation.pdf.
37. Tijani, B. (2024). *How Nigeria is leading on digital transformation for a stronger economy*. *World Economic Forum*. <https://www.weforum.org/stories/2024/09/nigeria-digital-transformation-3mtt-technical-talent/>.



COMMITTED TO
IMPROVING THE STATE
OF THE WORLD

The World Economic Forum, committed to improving the state of the world, is the International Organization for Public-Private Cooperation.

The Forum engages the foremost political, business and other leaders of society to shape global, regional and industry agendas.

World Economic Forum
91–93 route de la Capite
CH-1223 Cologny/Geneva
Switzerland

Tel.: +41 (0) 22 869 1212
Fax: +41 (0) 22 786 2744
contact@weforum.org
www.weforum.org