Marsh

Risk Resilience Report

Keys to Building a More Resilient Business: Anticipation, Forecasting, and Agility

May 2021

Foreword

During this challenging time of increased volatility and change, our commitment to our clients — and to helping them solve business challenges — remains steadfast. Throughout the past year, this commitment has been reinforced by our efforts to mitigate the widespread and accelerated impacts of the pandemic and other events.

Now, more than ever, organizations require a forward-thinking approach to risk management, one that will help drive preparedness and build resilience. In response to our clients' evolving needs, we developed the Marsh Risk Resilience Diagnostic.

By examining the impacts and interrelation of key risks across core business areas, the Resilience Diagnostic provides increased visibility into organizational exposures.

We started by conducting a detailed, global survey across nine regions involving nearly 1,000 organizations and representing 30+ diverse industries. The Resilience Diagnostic survey explored organizations' practice of and attitude toward risk management, and resulted in the attached *Marsh Risk Resilience Report*.

There was consensus among those surveyed on the importance of the risks we examined, and broad agreement on the need to better prepare for them. Significantly, the Resilience Diagnostic survey revealed gaps in how organizations perceive risk, and in the actions they are taking to manage them.

Resilience is a journey, one we are committed to take with our clients. I hope you find the report useful, and that it initiates and informs conversations within your organization.

Together, we can transform risk management and build more sustainable economies and communities.

Thank you,

John Q. Doyle
President and CEO
Marsh

Table of Contents

Executive Summary

As new challenges emerge and the risk landscape grows increasingly complex, Marsh remains committed to our clients and to delivering innovative solutions to better serve their evolving needs.

The Marsh Risk Resilience Diagnostic

Today, organizations can no longer view risks as a single threat vector. Organizations must identify, understand, and prepare for the impacts of systemic and emerging risks across their complete value chain.

To support clients in driving preparedness and building resilience, we developed the Marsh Risk Resilience Diagnostic. Deployed globally, our approach centered on a diagnostic survey that examined the impacts and interrelation of six emerging risks — pandemic; cyber, emerging technologies; climate/environmental, social, and governance (ESG); regulatory; and geopolitical — across core business areas.

While these six perils have long existed, they continue to rapidly evolve, with increasing magnitude, velocity, and interdependent impacts. As the survey validates, these remain a top priority for businesses.

Our Findings

Involving nearly 1,000 organizations from across 30+ industries and nine regions, the Resilience Diagnostic revealed large gaps in how organizations perceive risk and their actions to manage them.

Results indicated that **1 in 4 companies** do not align their risk and insurance buying processes to long-term growth strategies. Consequently, responses suggest that organizations are placing too much emphasis on certain perils — primarily those that pose an imminent threat — while other risks that are perceived as slower to evolve, but have similarly pervasive impacts, are largely overlooked.

Furthermore, despite broad consensus on the rising importance — and potential threat — posed by the six risks, **only 25% of companies** are evaluating or modeling the impact of emerging risks on their business.

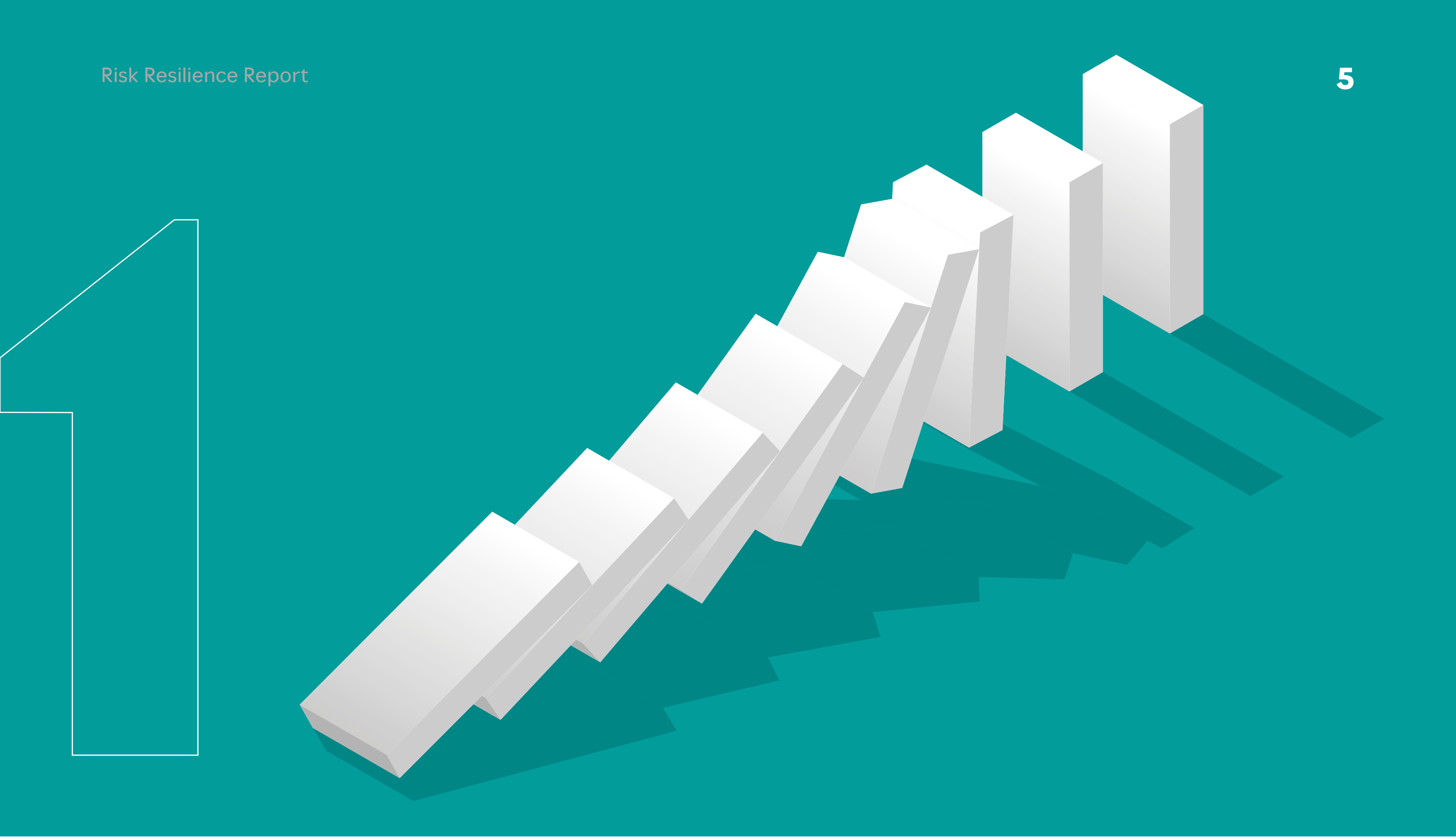
The findings showed that a business's **client/customers** would be most highly impacted by **five out of six** perils. However, results indicate the organizations are not implementing effective processes to adapt, learn and avoid disruption for this critical audience.

The Journey to Resilience

While gaps in perception vs. preparedness leave organizations vulnerable to immediate and long-term disruptions of their business operations, assets, and revenue streams, the journey towards resilience involves four common steps and behaviors. Together, these steps can transform risk management and support organizations in becoming more resilient:

1. Anticipating risk.
2. Connecting risk to strategy.
3. Avoiding gaps in the perception of preparedness.
4. Measuring what matters.

In applying these steps, increased visibility into, accountability for, and collaboration on risk must span across organizational roles. From traditional risk management functions to IT to compliance, legal, HR, and more — along with your trusted risk and insurance advisor — we all have a part to play in bolstering risk management strategies and building more resilient organizations.

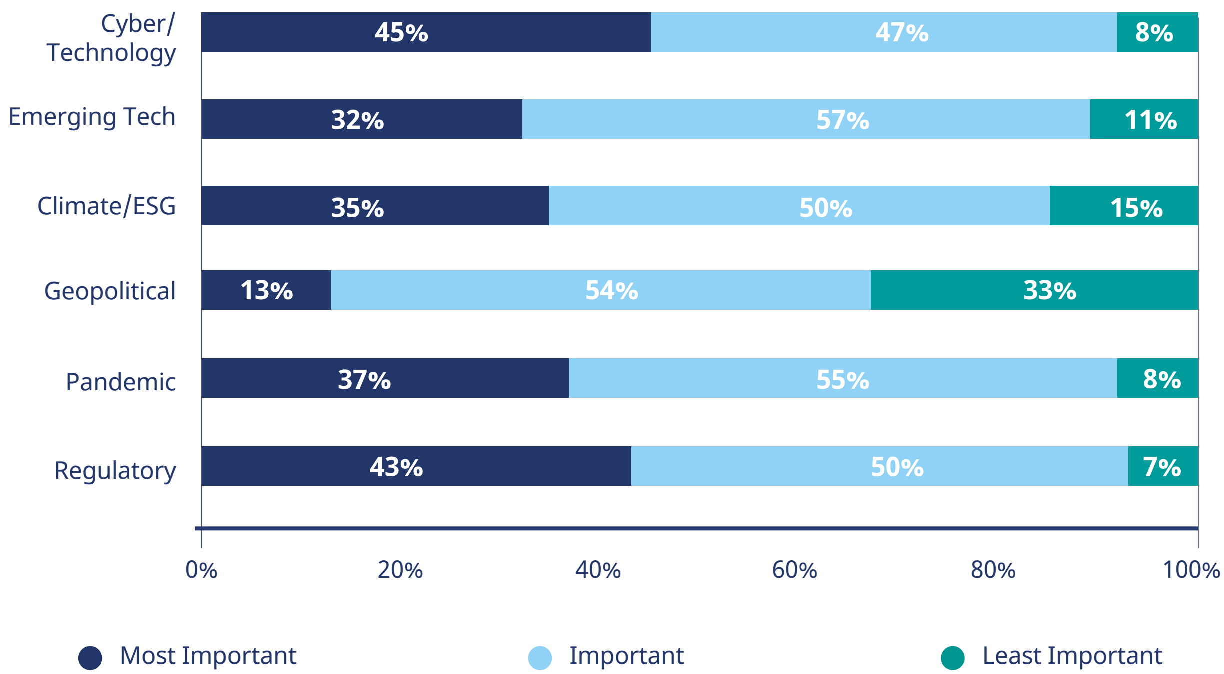


Current and Emerging Risk Landscape

Organizations operate in a hyper-connected world of risk, where seemingly isolated events expose the fragility of global systems. From the grounding of a container ship that shut down the Suez Canal to the ongoing COVID-19 pandemic and more, recent events demonstrate the increasing interconnectivity, impact, and velocity of risks.

While businesses are challenged to better plan, prepare for, and respond to shock events, other risks can unfold over a longer time. These risks, such as geopolitical change and regulatory issues, while often slower to evolve, can have similarly pervasive consequences.

01| There is broad agreement on the importance of various emerging risks.



Looking at current and emerging risks, one thing is clear: Organizations must be resilient. More than ever, resilience is crucial to organizations' ability to compete and achieve strategic growth. It should be at the top of every organization's agenda.

Why is resilience needed now? There was a time when risk was largely viewed as involving factors that impaired or destroyed value, primarily tangible assets. Today, the risk landscape has shifted. Tangible assets still matter greatly, but most businesses must also protect intangible ones — data, intellectual property, brand, reputation, relationships, and others — from which they derive much of their value. In 1975, intangible assets accounted for 17% of the total among S&P 500 companies; by 2020, that had grown to 90%.[1]

Risk is now seen as an opportunity for organizations to achieve competitive advantages. This shift in mindset requires an expansive, forward-thinking view of risk management and resilience.

Organizational resilience encompasses more than business continuity planning and the capacity to absorb negative events. Beyond the ability to recover quickly from and respond to events, resilience enables organizations to both foresee upcoming threats and capitalize on opportunities.

A risk resilient organization is able to minimize losses and quickly resume business as usual following an event — and more. A risk resilient organization has a strategic competitive advantage over less-prepared peers because it seizes growth opportunities during times of operational and/or financial stress.

Resilience is essential to an organization's future.

Marsh Risk Resilience Diagnostic

To support companies in evaluating and strengthening their resilience, Marsh developed the Risk Resilience Diagnostic. It began with a hypothesis: The impact of risk events during 2020 was heightened because many organizations failed to see their vulnerabilities. We surveyed nearly 1,000 organizations, representing more than three dozen industries across nine regions, ranging in size from less than US$500 million in annualized revenue to more than US$10 billion.

Assessing potential exposures across their complete value chain, the Risk Resilience Diagnostic helps organizations assess how their operational activities and risk management practices correspond to risk impact. Expressed via a Risk Resilience Score that is unique to each business, the Diagnostic enables organizations to benchmark their resilience level against their peers.

The survey examined the relationships between six emerging risks — regulatory; pandemic; cyber/technology; emerging technologies; climate/environmental, social, and governance (ESG); and geopolitical — and their perceived impact on organizations' core business areas.

Despite broad agreement on the importance of the examined risks (see Figure 1), the survey results show surprising gaps between how organizations perceive risk and their actions to manage them.

COVID-19: ONE OF MANY PANDEMICS

The COVID-19 pandemic offers valuable lessons on risk and resilience. The pandemic revealed fault lines within many organizations, and degrees of systemic risk that few organizations previously considered. A lack of business continuity planning, the breakdown of supply chains, and overall stresses on business operations have brought to the forefront the need to reimagine approaches to managing enterprise risk.

The human tragedy of COVID-19 is still playing out, with more than 3 million deaths reported to date, a number that continues to rise. Historical data show that COVID-19 is not a unique occurrence. Illness, death, and economic loss come with pandemics, which arise relatively frequently. Since the "Spanish flu" pandemic in 1918, no fewer than nine pandemics have occurred, roughly one every 10 years, with death tolls in the millions and financial impact in the trillions.

Given this frequency and the potential for increased severity in future events, what will organizations learn from COVID-19 and how will they respond to the next pandemic? The answer to this question will likely determine an organization's ability to absorb financial and operational stress, recover, and remain competitive.

Risk Events Unfold at Different Speeds

Risk events today develop at different velocities. The COVID-19 pandemic took weeks for its impacts to be felt globally, whereas a widespread power outage or a crippling cyber-attack can cause immediate damage. Organizations need to account for the increasing risk velocity in their resiliency planning.

Assessing an organization's agility, our survey found that 1 in 4 organizations are not implementing effective processes to identify, respond to, and enact changes based on trending risk issues.

As risk velocity remains high and continues to accelerate, some organizations are trapped by prior experience, confidence bias, or simply by not seeing risks.

Shock, or sudden, events are not new, but their impact on people, supply chains, and financial assets is growing due to the interconnectedness of global systems. These events highlight the fragility of the systems on which trade, growth, and prosperity depend.

What roles do frequency or historical patterns play in how organizations perceive the potential severity of a risk? There may be an assumption that a future event will play out similarly to ones in the past, or that a historical lack of a type of event makes it unlikely to occur.

Anticipation and modeling can help provide a better understanding and assessment of risk frequency and severity, which in turn helps organizations become more resilient. Our survey found that, across risk areas, many organizations are selectively modeling their exposures, or not modeling their risks at all. Across all risks, results indicate that only 10% to 30% of respondents have conducted scenario-based modeling across their entire enterprise to evaluate the potential impact of emerging risks; 40% to 50% conduct it only on primary exposures or selected areas.

02| Emerging and shock events bring a variety of impacts.

Event and Impact

Suez Canal closure

On March 23, 2021, a grounded container ship blocked marine traffic for a week in the Suez Canal, the fastest shipping route between Europe and Asia, transporting 2% of global trade volume daily.[2] The event disrupted supply chains and delayed the delivery of raw materials to production sites and finished goods to market. The event came at a time when ports and terminals were already experiencing large delays.

Texas power outages

In February 2021, extreme weather caused massive power outages in Texas, leaving nearly 5 million customers without electricity.[3] The event disrupted businesses and individuals, prompting legislators to introduce bills that would require power companies to prepare plants for extreme weather.

Internet of Things growth

By 2027, there could be more than 41 billion IoT devices in use, affecting nearly every aspect of business life.[4] And each device is a potential target for a cyber-attack. Because many IoT devices lack strong security features, they can create a gateway for hackers — posing a liability threat and creating other risks for their designers, manufacturers, and users.

Increased country economic risk

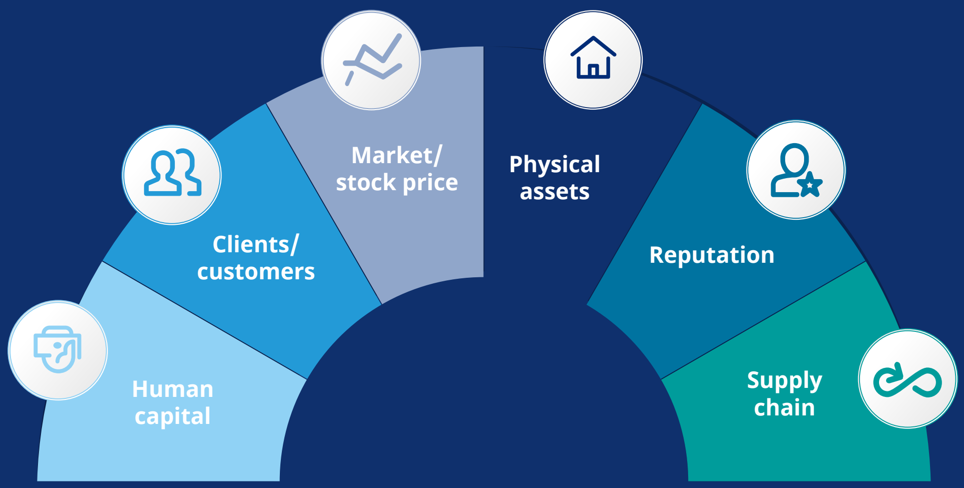
In 2020-21, COVID-19 amplified geopolitical and economic challenges globally. The increase in country economic risk is felt in such areas as sovereign credit risk, currency risk, commercial risk, and a broader rise in social inequality.[5] Such factors will increase the cost and risk of doing business in some parts of the world.

Whether an organization faces a sudden event that strikes with little warning, or a risk that emerges over time, the preparation needed to achieve resilience is the same. By analyzing the impacts of risks across core business areas, the survey results highlight the importance of aligning risk and resiliency planning to long-term business strategy — and the need for organizations to better anticipate risks.

Among the lingering questions: Will organizations consider individual events as anomalies, or as warnings about the vulnerability of global systems? Will organizations learn from recent events, such as the COVID-19 pandemic, and strengthen their resilience?

Risk Impacts on Core Business Areas

The Risk Resilience Diagnostic analyzed six emerging risks in relation to the impacts they have on organizations’ core business areas:

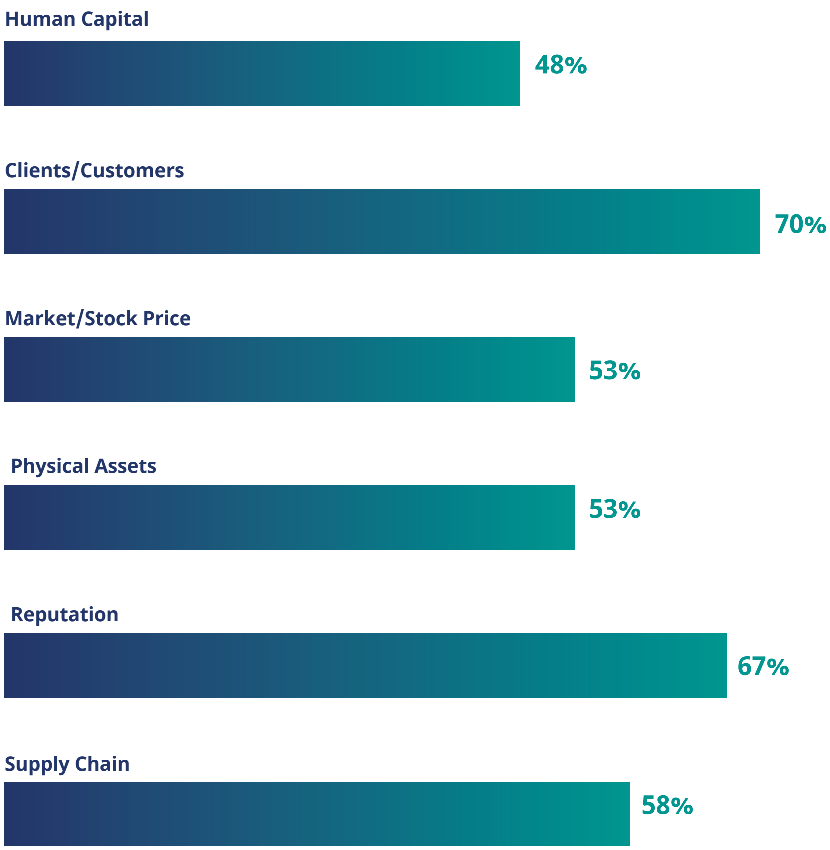


1. CYBER/TECHNOLOGY

Cyber threats are pervasive and accelerating, costing global businesses billions every year and creating exposures across almost every aspect of an organization's value chain. For example, the average business interruption outage from a ransomware attack now exceeds 20 days, with demands for more than $1 million common. Despite the resources organizations are committing to cyber risk, gaps remain in understanding preparedness. Technical measures and controls, while necessary, are not sufficient to manage the risk.

03| Impact on Core Business Areas: Cyber/Technology

Clients/customers and reputation are viewed most often as being impacted by cyber/technology risk.*



**Percentages denote core business areas most likely "impacted" and/or "highly impacted" by emerging risk.*

OBSERVATIONS FROM SURVEY RESPONSES

Clients/customers and reputation are the core areas most commonly cited by survey respondents as being highly impacted by cyber/technology risk (see Figure 3).

46%

of respondents say their organizations can withstand the financial impact of a significant cyber-attack. However, less than one-third of that group forecast and model cyber risks, inviting the question: How are organizations sizing the financial risks from cyber-attacks?

Only 18% of companies say they are highly prepared for cyber risk, despite 45% having rated it as the most important risk.

20%

Those that measure risk in financial terms are over 20% more likely to have a highly integrated risk team driving resiliency plans and strategies.

OBSERVATIONS FROM SURVEY RESPONSES

Clients/customers is the core area most commonly cited by survey respondents as being highly impacted by emerging technologies risk (see Figure 4).

More than 80% of organizations surveyed indicate they are prepared or highly prepared for risks from emerging technologies. Yet more than 30% say they are challenged to identify, respond to, and implement changes based on emerging technologies.

81%

Despite the pervasiveness of technology change and adaptation, 81% of respondents only partially measure, or do not measure, the potential financial risk.

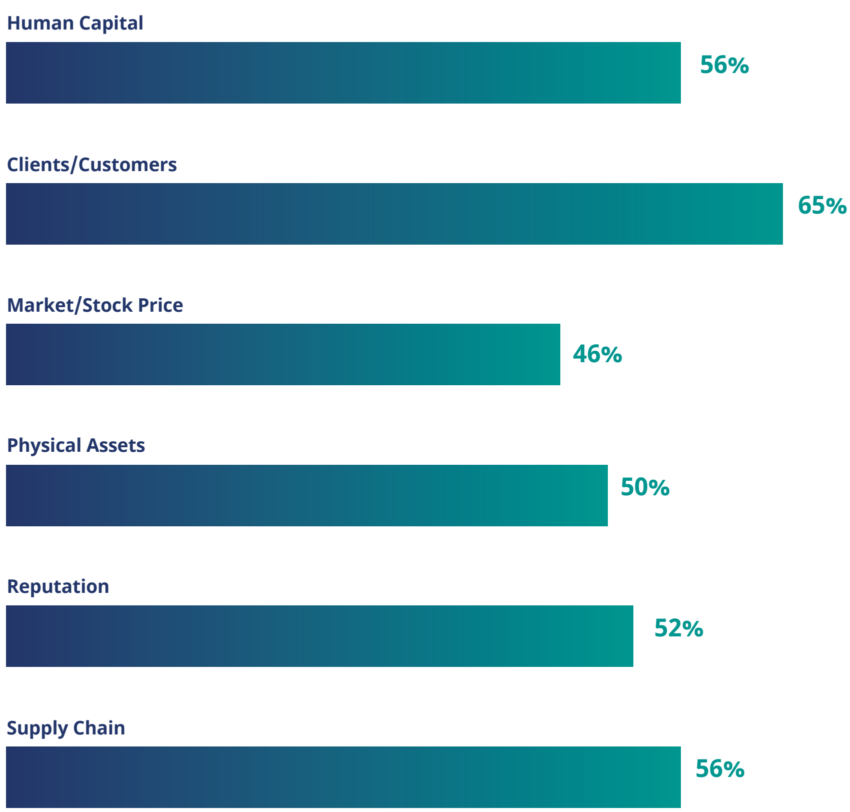
The responsibility for managing the risk of new technologies is often distributed across multiple functions in the organization.

2. EMERGING TECHNOLOGIES

Emerging technologies — including artificial intelligence, machine learning, and Internet of Things (IoT) — reflect the accelerating digitization affecting all businesses. While most organizations believe they are effectively identifying these risks, nearly as many are measuring the potential impacts of these risks only somewhat or not at all. While most organizations struggle to identify and map emerging technology risk, these technologies will cause immense shifts in the cyber-attack surface, organizational liability, and supply chain risk.

04| Impact on Core Business Areas: Emerging Technologies

Clients/customers is the area most often seen as being highly impacted by emerging technologies risk.*



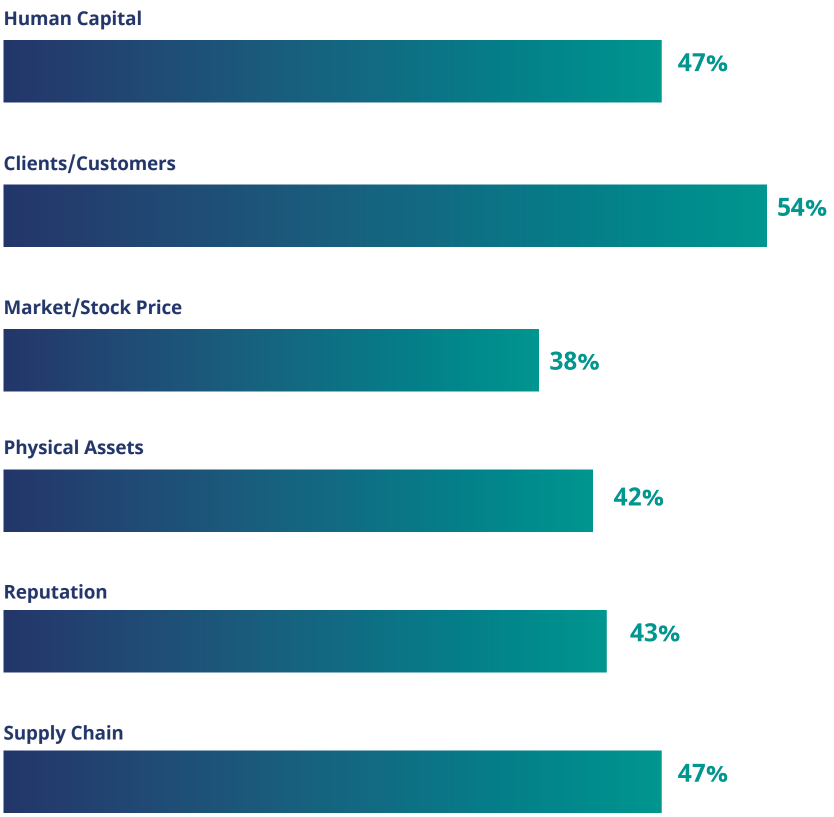
**Percentages denote core business areas most likely "impacted" and/or "highly impacted" by emerging risk.*

3. CLIMATE/ENVIRONMENTAL, SOCIAL, AND GOVERNANCE

Climate/ESG issues pose important questions for all organizations. Today, climate sits at the forefront of the environmental agenda, while other issues such as water use, pollution, and stewardship of natural resources present rising environmental concerns. Globally, regulators, investors, and governments are increasingly expecting — and demanding — action and transparency across climate/ESG, on issues including diversity, equity, and inclusion; workforce and product safety; the role and makeup of boards; and executive compensation.

05| Impact on Core Business Areas: Climate/ESG

Clients/customers is the area most often seen as being highly impacted by climate/ESG risk.*



**Percentages denote core business areas most likely "impacted" and/or "highly impacted" by emerging risk.*

OBSERVATIONS FROM SURVEY RESPONSES

Impact to a business's clients/customers is most commonly cited by survey respondents as being highly impacted by climate/ESG risk (see Figure 5).

85%

While 85% of respondents rate climate/ESG as either important or very important, 45% say they have an ineffective or no process for identifying, responding to, and implementing changes based on climate/ESG risks.

40%

Overall, 40% do not stress-test financial impacts from climate/ESG threats.

20%

About 20% to 30% believe climate/ESG does not affect any of their core business areas.

Clients that view climate/ESG as an important risk are more subject to and more likely to see the importance of regulatory risk.

OBSERVATIONS FROM SURVEY RESPONSES

Clients/customers and supply chain are the core areas most commonly cited by survey respondents as being highly impacted by geopolitical risk (see Figure 6).

40%

40% of organizations with revenue of more than US$10 billion actively monitor geopolitical exposures, compared to 16% of firms with revenue under US$10 billion.

60%

Nearly 60% of companies believe geopolitical risk impacts or highly impacts their clients/customers and supply chain.

40%

Almost 40% have either an ineffective or no process to identify and respond to geopolitical trends.

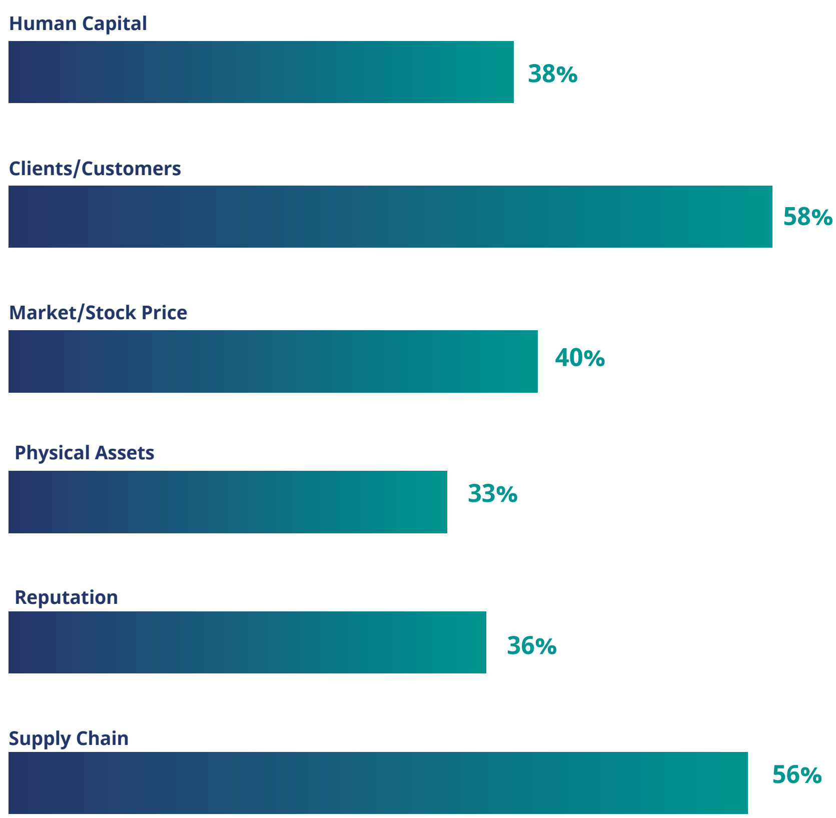
Many respondents say that it is not an important risk, yet subsequently indicate that geopolitical forces hold potentially significant business impact.

4. GEOPOLITICAL

Geopolitical risk areas are perhaps the least appreciated by survey respondents. When they are considered, supply chains are the primary focus. Geopolitical forces — including fallout from COVID-19 travel restrictions, trade disputes, and regional political violence events — are underappreciated, especially considering they will only increase in complexity for the foreseeable future. The interconnected nature of risk means that whether or not there is a direct relationship to business impacts, geopolitical forces act as an accelerant to other events, including trade/tariffs, security, climate, and cyber events.

06| Impact on Core Business Areas: Geopolitical

Clients/customers and supply chain are the areas most often seen as being highly impacted by geopolitical risk.*



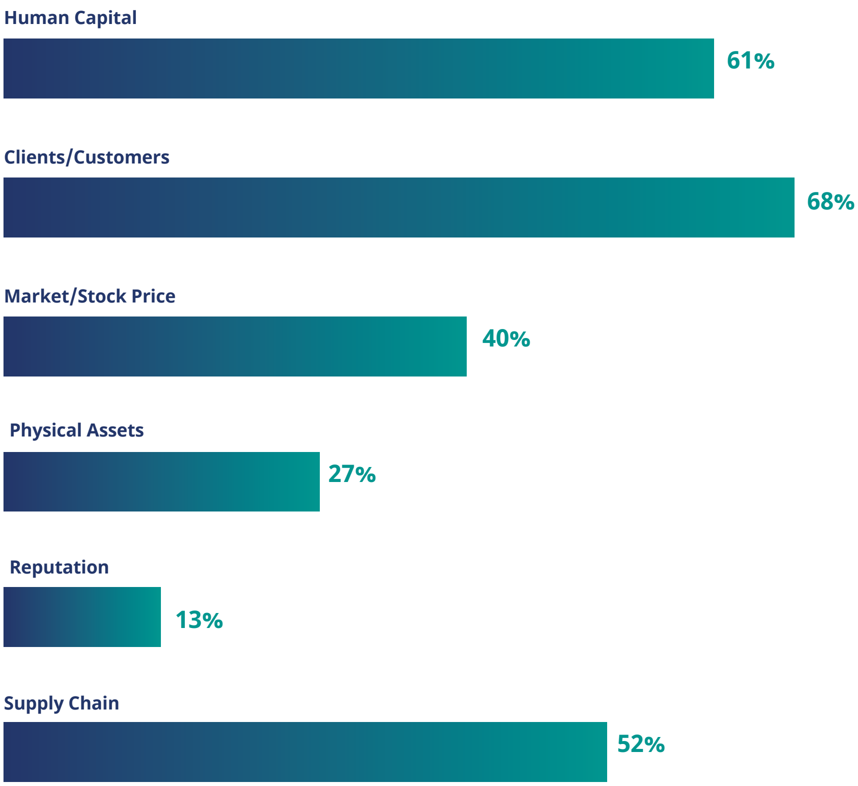
**Percentages denote core business areas most likely "impacted" and/or "highly impacted" by emerging risk.*

5. PANDEMIC

As COVID-19 vaccination efforts are underway, organizations are looking to understand and apply lessons learned regarding how to manage future pandemics. Among the six risks we looked at, pandemic has the highest percentage of respondents conducting scenario-based modeling — 46% of companies overall. Organizations should challenge what they have learned from the pandemic to avoid embracing the wrong conclusions.

07| Impact on Core Business Areas: Pandemic

Clients/customers is the area most often seen as being highly impacted by pandemic risk.*



**Percentages denote core business areas most likely "impacted" and/or "highly impacted" by emerging risk.*

1 2 3 4 5 6

OBSERVATIONS FROM SURVEY RESPONSES

Clients/customers is the core area most commonly cited by survey respondents as being highly impacted by pandemic risk (see Figure 7).

While 46% of respondents say they have a model-based approach to pandemic risk, only 28% believe they are highly prepared.

60%

About 60% of respondents say a pandemic either impacts or highly impacts human capital and supply chain.

Organizations that are more siloed in their approach to risk may face risk mitigation and recovery issues.

OBSERVATIONS FROM SURVEY RESPONSES

Clients/customers and supply chain are the core areas most commonly cited by survey respondents as being highly impacted by regulatory risk (see Figure 8).

While 10% of respondents say they are not well prepared for regulatory risks, 73% say they only partially measure regulatory risks — or not at all. This indicates a significant disconnect in organizational perception around regulatory risks.

19%

Only 19% say they have a very effective process for evaluating changing insurance requirements based on the evolving regulatory environment.

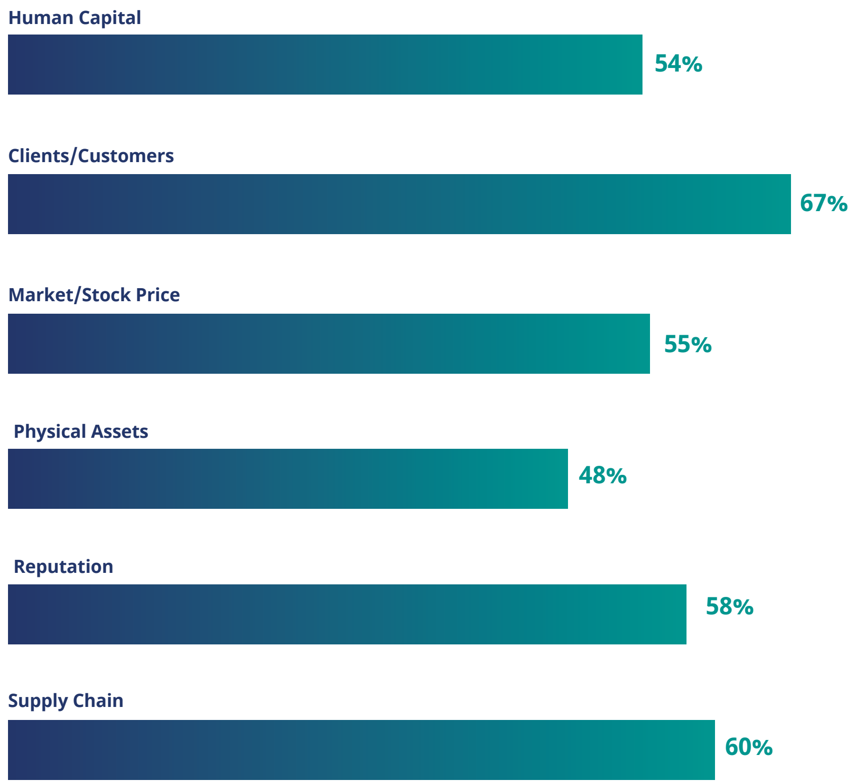
Only 32% are comprehensively evaluating D&O coverage requirements in light of emerging regulatory/legal changes, and 16% have no evaluation in place.

6. REGULATORY

The regulatory environment is constantly changing, particularly for companies operating in multiple countries. From tax codes to data privacy regulations to environmental standards to workforce issues and more, regulatory compliance is complex, and connects to many other risks. For example, the increasing disclosure requirements around climate/ESG are likely to complicate issues ranging from reputational risk to D&O exposures.

08| Impact on Core Business Areas: Regulatory

Clients/customers and supply chain are most often seen as being impacted by regulatory risk.*

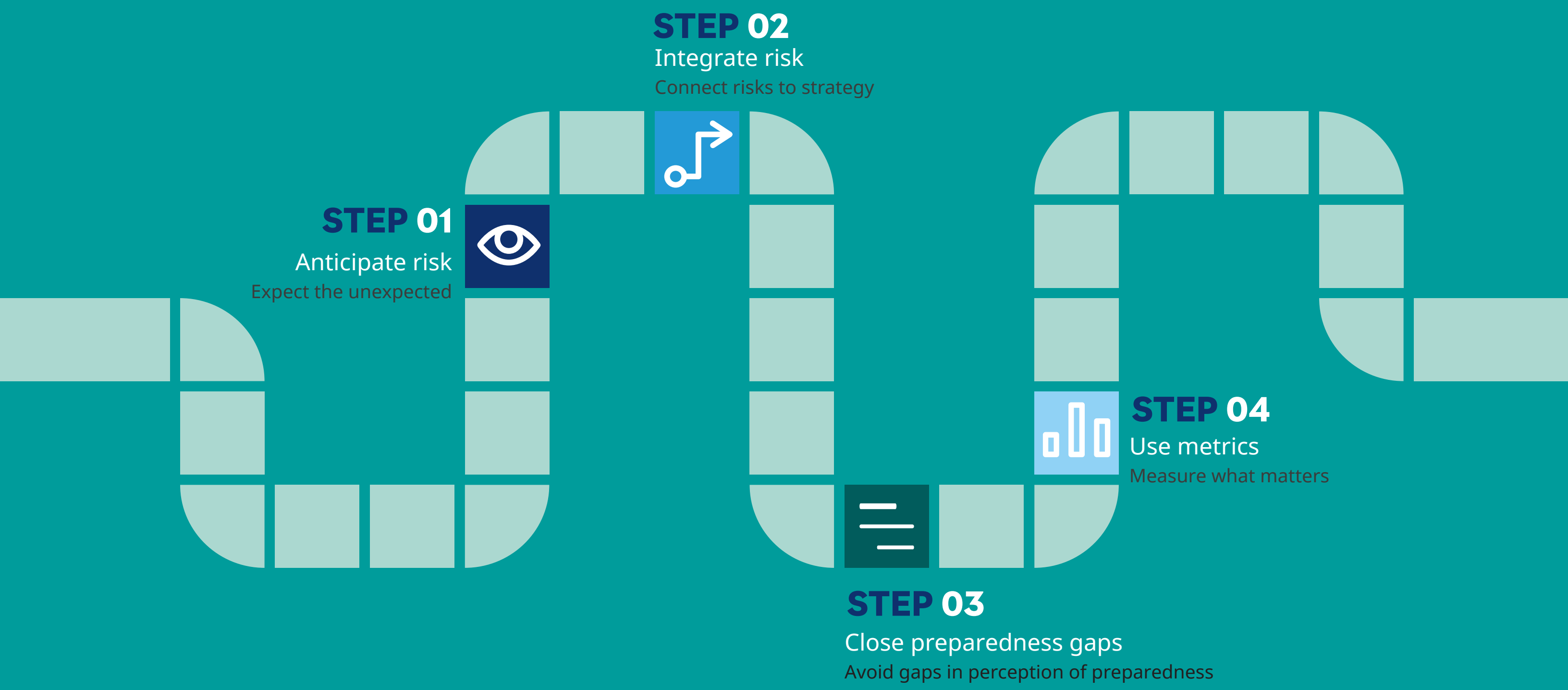


**Percentages denote core business areas most likely "impacted" and/or "highly impacted" by emerging risk.*

The Journey to Resilience

Given the ever-changing nature of emerging risks, it's not a surprise that resilient organizations tend to outperform their peers. There is a direct correlation between resilience and viability, growth, and competitiveness.

The path to becoming more resilient will be different for every company, but the journey involves four common steps and behaviors:



1. ANTICIPATION: EXPECT THE UNEXPECTED

The ability to anticipate risks means to expect the unexpected. It involves more than just having a crisis management plan in place — it means looking farther and deeper.

During the pandemic, even organizations with robust business continuity plans struggled because they failed to fully anticipate the extent of its impacts. Across all risks, results indicate that only **25%** of respondents use scenario-based modeling across their enterprise or comprehensively to evaluate the potential impact of emerging risks; **45%** use scenario-based modeling somewhat, on selected exposures, or in a limited way.

In the journey to resilience, effective anticipation of risks is the first step. If an organization cannot anticipate risks, it cannot effectively complete the other steps to resilience.

A number of metrics can help organizations better anticipate risks, including:

- Measurements of risk aggregation and interdependencies across the value chain to help show the degree of contingent business interruption risk present.
- Stress-testing metrics, including those that will help determine how much stress the organization can withstand and at what points in the value chain.
- Early warning crisis-event metrics, which can guide early decision paths during an event’s initial days.
- Metrics on essential supply chain partners to help evaluate counterparty risk.

As growth strategies and risk ecosystems change, the journey to resilience requires that organizations keep looking ahead.

2. CONNECTIONS: INTEGRATE RISK MANAGEMENT AND STRATEGY

Another critical step toward resilience is to ensure that risk management is fully integrated with the organization's operations and strategy.

When organizations do not anticipate risks or align them with strategies, they limit their ability to develop effective responses. Connecting risks to long-term strategy helps organizations move forward and mitigate their financial exposure, reputational damage, business interruption, and other losses.

Against the set of risks that survey respondents cited as important, there was a lack of alignment in several areas. For example, about 25% of respondents do not align risk and resiliency planning and insurance buying to their long-term growth strategies.

Most organizations surveyed do not connect resilience planning with their long-term investment strategy, and smaller companies are even less likely to do so (see Figure 9).

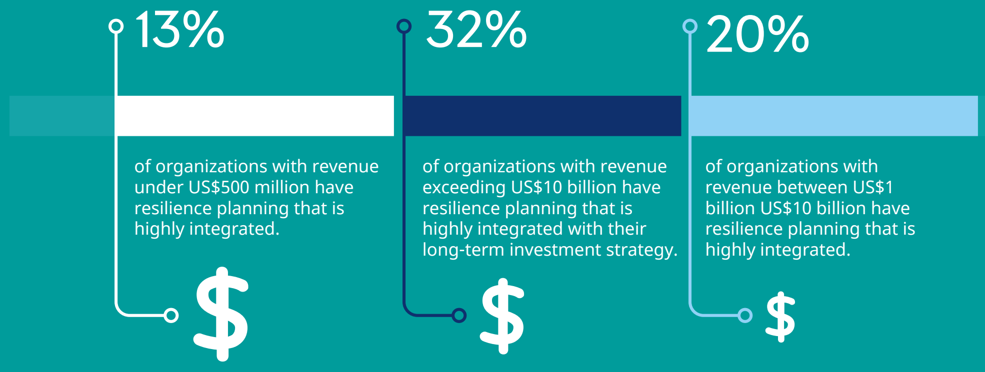
For most organizations, a core reason for not connecting risk to strategy is a lack of cross-functional collaboration. Collaboration across business functions and increased transparency into potential exposures is critical.

Resilient organizations typically align through a collaborative process, and seek expert help in assessing their preparedness to complete the journey. Without such collaboration and counsel, organizations will likely struggle to anticipate risks, which will impair their ability to develop effective response plans.

25%

of companies do not align risk and resiliency planning and insurance buying to their long-term growth strategies.

09| Larger companies are more likely to integrate resilience planning with investment strategy.



3. GAPS: AVOID MISPERCEPTIONS OF PREPAREDNESS

Clearly seeing the path ahead is critical to the success of any journey. Resilient organizations assess the risk terrain and determine whether they have the necessary resources to navigate it. An accurate perception of organizational preparedness is necessary, because a false sense of security can halt an organization in its tracks.

Survey respondents self-assessed their organizations' level of preparedness for six emerging risks. Their responses show gaps between how organizations view risk importance and how they perceive their own preparedness (see Figure 10).

There is a seeming incongruence between the way some respondents prioritized and rated the business impact of certain risks and their stated risk management techniques. This could be explained in part by the "illusion of control," a cognitive bias identified nearly 50 years ago in which people perceive themselves to have control over random events[6]. In other words, this bias may prompt individuals within organizations to overestimate their preparedness and ability to respond to and recover from a particular risk.

The consequences of not being prepared can be severe. History has shown that organizations' fortunes can unravel quickly following a shock event. Their options to manage an event may dwindle as circumstances spiral, as they did for many banks during the 2008 financial crisis, and more recently with the hospitality and travel industry during the pandemic.

10| Gaps exist between organizations' view of risk importance and perceived preparedness.

93%

of respondents rate regulatory risks as important or highly important, yet only 16% say they are highly prepared for those risks, while 74% say they are prepared.

92%

of respondents rate cyber/technology risks as important or highly important, but 18% say they are highly prepared, and 70% prepared.

89%

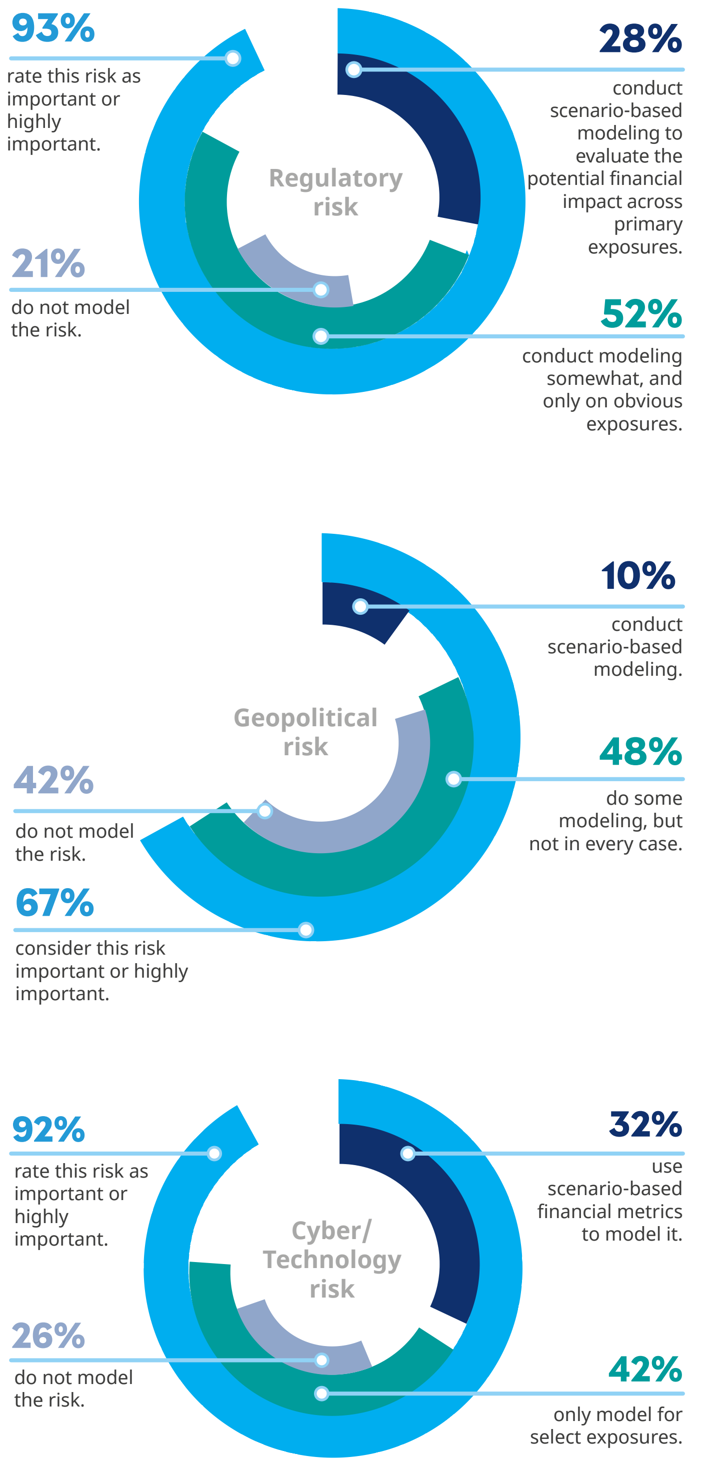
rate emerging technologies risks as important or highly important, but just 9% say they are highly prepared, and 73% prepared.

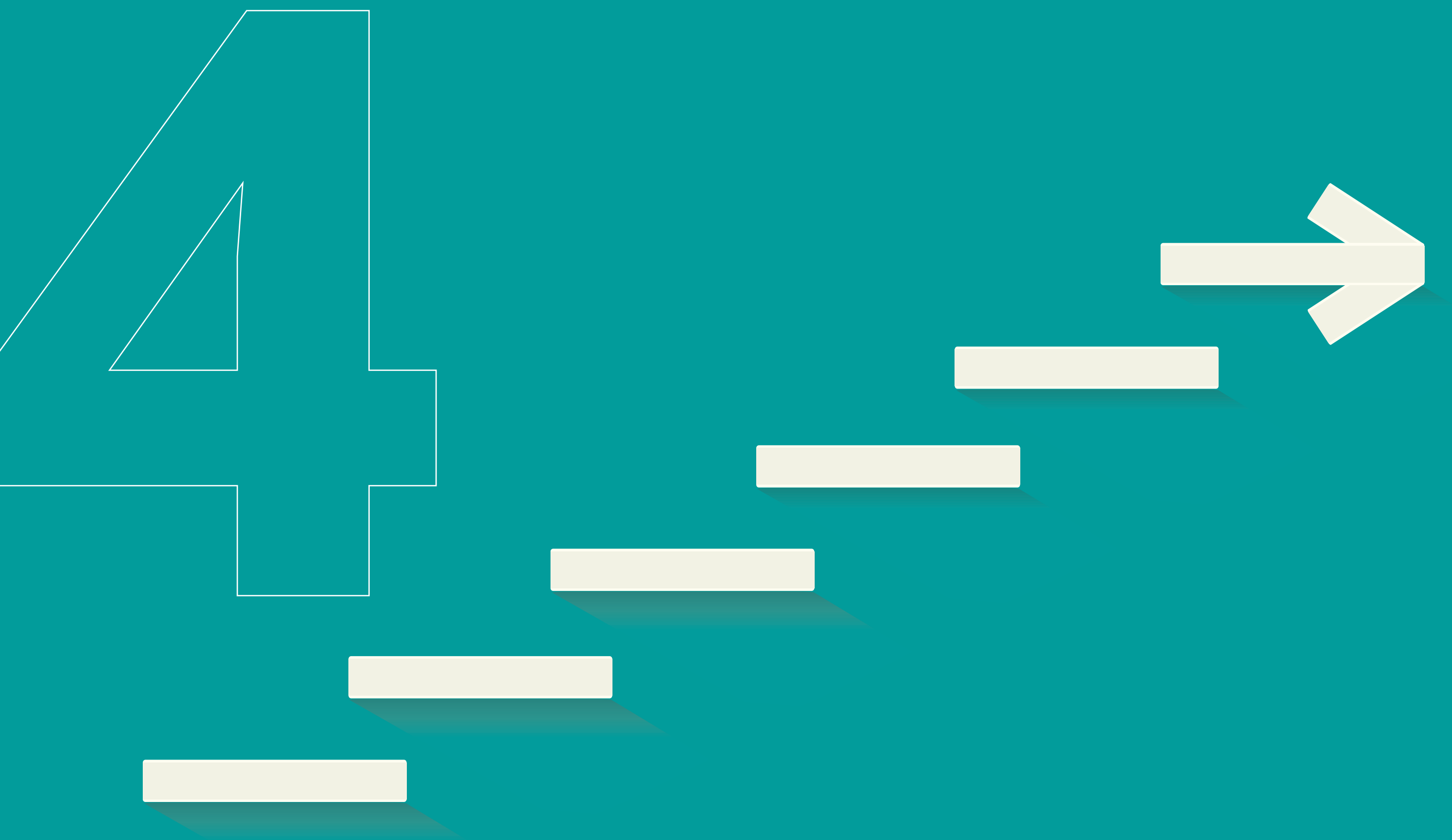
4. METRICS: MEASURE WHAT MATTERS

Survey results indicate that applying metrics consistently is a stumbling block for many. Organizations should deploy effective metrics to measure exposures in their journey to resilience.

For risks that respondents rate as important or highly important, we would expect to find organizations conducting modeling and forecasting at correspondingly high rates. However, only a minority do so, and most of those perform modeling and forecasting only in select areas (see Figure 11).

11| **Most companies perform modeling and forecasting only in select areas, if at all.**





Levers of Resiliency

Resilience pertains to specific circumstances and challenges. To help overcome potential roadblocks as they embark on the journey to resilience outlined in the previous section, organizations need some navigation tools — levers that provide an advantage.

Let’s consider each of three levers — anticipation, modeling/forecasting, and organizational agility — that work together to enable organizations to achieve resilience.

To begin, it is important for organizations to raise some questions internally:

- Do we have a robust mechanism in place to **anticipate** future risks?
- Can we **model and forecast** the risk once we have identified it?
- Are we **agile** enough to identify, respond to, and implement risk management measures?

Culture of Anticipation and Collaboration

Anticipation, the first step toward resilience, is enabled by collaboration across the enterprise. Without collaboration, organizational silos develop, often resulting in a failure to identify exposures.

Our survey found that, on an aggregated basis:

- **24%** of respondents anticipate emerging risk categories with a comprehensive and/or formal process.
- **52%** are somewhat or partially anticipating emerging risks, but not in a comprehensive fashion.
- **19%** do not have any process for anticipating emerging risks.

Because organizations cannot anticipate everything, they should prioritize risk categories based on factors including their risk appetite, resourcing constraints, and operating profile.

As risks grow increasingly interconnected, an organization's ability to anticipate one category may relate to its anticipation of another. Therefore, risk evaluation and treatment can — and should — operate across categories and organizational stakeholders.

It's important to recognize that resilience should be viewed through an enterprise lens. In resilient organizations:

- Senior leaders are responsible for driving risk management strategies and resilience work to achieve a common goal.
- Coordination to align on risks occurs across risk functions, through either a formal risk committee or an ad hoc group. Risk committees — with representation from business units and risk-adjacent teams, such as safety and compliance — help ensure input from a diverse range of stakeholders, including those most in tune with everyday operational risks.
- Alignment of risk evaluation to corporate strategy happens over a multiyear period, which helps drive a culture in which resiliency is embedded in business planning.

Modeling/Forecasting

If an organization anticipates risks, a significant next step toward resilience is to apply modeling and forecasting to assess their potential impact.

A well-known military axiom is that generals often prepare to fight the last war, rather than planning for the next one. A similar dynamic may be playing out in corporate offices and boardrooms today around the COVID-19 pandemic. Senior leaders need to be careful to not focus too much on specific challenges of the past year as they look for lessons. They should consider how the issues from this event can inform responses to future threats — including some that may look nothing like a pandemic.

It's important to engage in scenario planning to understand emerging threats, and to incorporate data and analytics. Organizations should ask: Are we doing enough to stress test, measure, and model the financial impacts of critical risks? Are we doing so in a forward-looking manner that connects the risk with our growth strategy?

Our survey found:

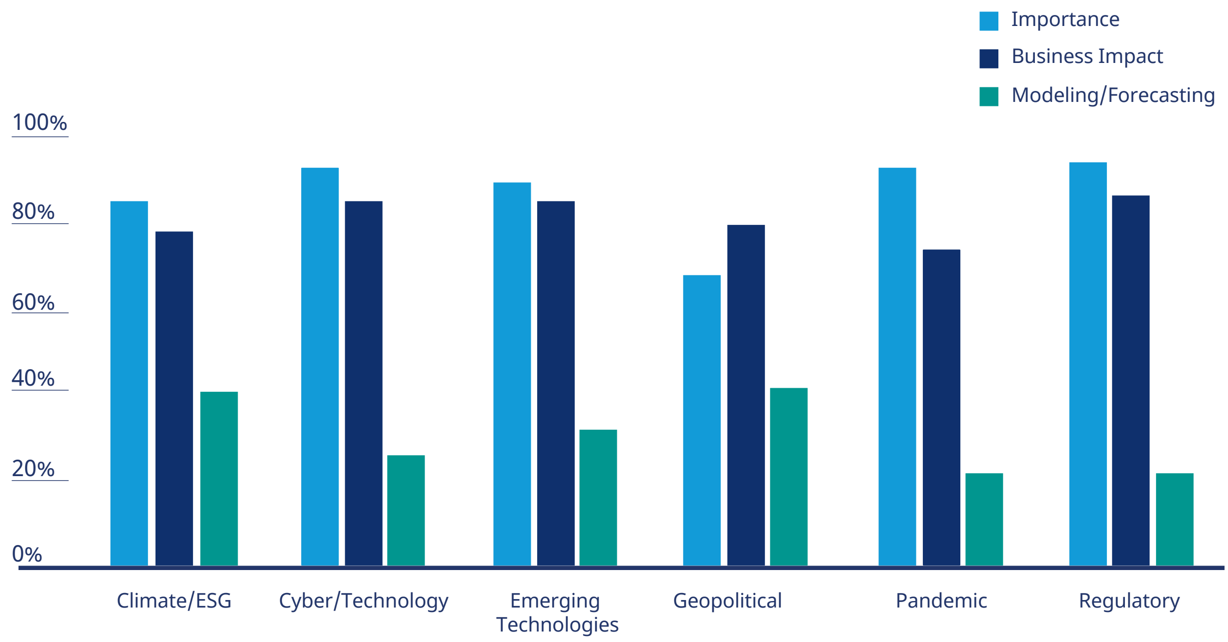
- **25%** of respondents use scenario-based modeling across their enterprise or comprehensively.
- **45%** use scenario-based modeling somewhat, on selected exposures, or in a limited way.
- **30%** do not use scenario-based modeling on risk exposures.

Modeling/forecasting is a peril-specific activity. Organizations would be expected to perform modeling/forecasting commensurate with the risks they see as the highest in importance. However, survey results showed that is not always the case.

Survey results indicate misalignment between respondents' focus on forecasting a given risk and the business impact of that risk (see Figure 12). For example:

- **93%** of respondents consider regulatory risks to be important or highly important, and 86% indicate this risk has high to mild impact on their core business areas. Yet 71% of respondents are only somewhat forecasting regulatory risks — or not at all.
- Despite an increasing focus on climate/ESG, **88%** of respondents noted that they are only somewhat or not modeling for this risk, with only 16% modeling it comprehensively.
- **89%** rate emerging technologies risk as important or highly important, and 85% say it has a high to mild impact, yet 81% conduct only some or do no modeling of this important category.

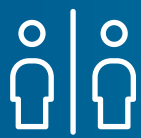
12| Perceived importance of risk does not always align with the modeling undertaken.



Our survey suggests that many respondents place too much emphasis on the importance and impact of certain perils, primarily pandemic risks. They do not place enough emphasis — under-indexing — on other risks with significant potential impact, and are not modeling for these emerging risks. These are areas that organizations should assess carefully, prioritize accordingly, and aim to drive alignment across core business owners and operations.

RESILIENT ORGANIZATIONS TEND TO:

Develop a cadence to continually challenge risk assumptions.



Adopt a long-term perspective to risk.

Organizational Agility

Organizational agility refers to the process and flexibility that companies deploy in managing risks. It involves identifying and responding to risk and implementing effective changes — keeping the map updated on the journey to resilience.

A key piece of agility is organizational learning: As risks evolve, organizations must apply a learning process and update their plans accordingly. The other levers in resiliency — anticipation and modeling/forecasting — and a culture of collaboration all support organizational agility.

Survey respondents consider their organizations to be most effective and agile regarding pandemic risks: 93% say their company has effectively or very effectively reviewed, learned, and implemented risk management policies/procedures. As organizations move past the pandemic, they will need to adjust their focus on agility around higher-frequency threats.

The risk for which respondents appear to be least effective and agile is emerging technologies. In this area, 65% say that half or more of their emerging technologies risk exposure is in their vendors' control — they are dependent on vendors to mitigate emerging technologies risk.

Agility in the other risk categories varies:

- **86%** say their organization has an effective or very effective process for identifying, responding to, and implementing changes based on cyber/technology trends.
- **74%** are effective or very effective in evaluating changing insurance requirements based on the evolving regulatory environment.
- **60%** have an effective or very effective process regarding geopolitical trends.
- **56%** have an effective or very effective process regarding climate/ESG trends.

Senior leaders should take a close look at their organizations' processes for identifying, responding to, and implementing changes based on key risk trends. They should also consider what portion of their risks are under their organization's control, as opposed to third parties. And they should evaluate how effective they are in evaluating changing insurance requirements based on evolving risk needs.

Develop scenario planning under different time horizons.

Map risks across the entirety of the value chain to determine potential impacts.

Deploy financial stress tests in forecasting to evaluate present and future risk.

Use predictive modeling to capture future risk over different time periods.

5 Maintaining Resilience is a Continuing Journey

Recent events have tested organizational resilience, and emerging risks on the horizon will continue to do so. Risk managers, boards, and C-suite leaders know there is always room to improve resilience, and the changing risk landscape requires it to be at the top of their organization's strategic agenda.

Achieving resilience will be increasingly essential as a way for organizations to differentiate, achieve growth objectives, and attain a strategic competitive advantage.

Our survey findings show that many organizations can deepen their understanding and assessment of risk through anticipation and modeling. For those organizations that are only selectively modeling their exposures, or not modeling them at all, this is an area for urgent improvement.

We have seen highly resilient organizations demonstrate mastery of risk anticipation through cultures of collaboration and from learning the right lessons from past experience. These organizations connect risks to their long-term growth strategies by embedding risk management in business planning.

Effective anticipation is the first step in building resilience. Having a clear view of risk, informed by measuring relevant data, enables organizations to prepare for and respond to events, and to seize opportunities for growth during times of stress and crisis.

Without question, risks will continue to become more complex and interconnected. Organizations should strive to better understand their risks and the impact they may have on core business areas — and then realign their risk management resources to bridge any gaps.

The Marsh Risk Resilience Diagnostic is an insightful tool that can help organizations better manage emerging risks, power informed decision-making, and ultimately increase their resilience.

For more information on the Risk Resilience Diagnostic, contact your Marsh representative or visit https://www.marsh.com/us/insights/research/risk-resilience-report.html

6 Appendix

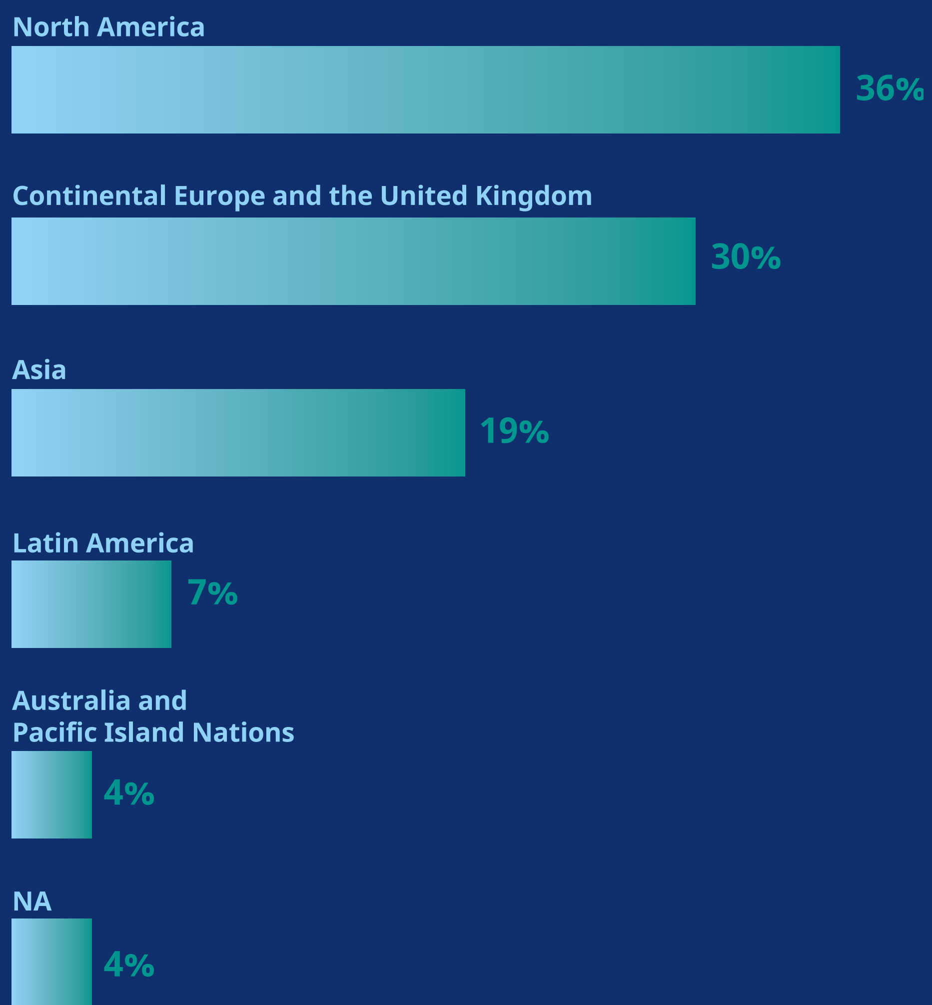
Survey Methodology

In early 2021, Marsh surveyed nearly 1,000 client organizations in the United States and Canada, Latin America, Continental Europe and the United Kingdom, Africa, Asia, the Middle East, and Australia and Pacific Island Nations. Respondents represented more than 36 industries, including manufacturing, energy, real estate, retail, construction, health care, banking and financial services, and professional services.

The survey's objective was to measure respondents' resilience in six risk areas — climate/ESG, cyber/technology, emerging technologies, geopolitical, pandemic, and regulatory. The survey asked respondents to self-assess their organization on the basis of anticipation, modeling/forecasting, preparedness, and organizational agility.

From the participants' responses, Marsh compiled Risk Resilience Scores for individual organizations as well as benchmarks across industry, geography, and revenue size.

Regions



Endnotes

1 "We are all tech companies now," Fortune.com, January 25, 2021

2 "Ever Given Grounding: Suez Canal Closure Highlights Marine Industry Risks," Stephen Harris, Marsh Risk in Context, April 7, 2021

3 "Texas power crisis prompts Texas House panel to advance several bills, including one requiring plants to prep for extreme weather," Erin Douglas, The Texas Tribune, March 18, 2021

4 "The Internet of Everything: Building Cyber Resilience in a Connected World," Marsh Insights, April 2018

5 "Political Risk Map 2021: Pandemic Recovery Complicates Risks," Marsh

6 "The illusion of control," E.J. Langer, Journal of Personality and Social Psychology, 1975

About Marsh

Marsh is the world's leading insurance broker and risk advisor. With around 40,000 colleagues operating in more than 130 countries, Marsh serves commercial and individual clients with data-driven risk solutions and advisory services. Marsh is a business of Marsh McLennan (NYSE: MMC), the world's leading professional services firm in the areas of risk, strategy and people. With annual revenue over $17 billion, Marsh McLennan helps clients navigate an increasingly dynamic and complex environment through four market-leading businesses: Marsh, Guy Carpenter, Mercer and Oliver Wyman. For more information, visit mmc.com, follow us on LinkedIn and Twitter or subscribe to BRINK.

Marsh

1166 Avenue of the Americas, New York 10036

21–680488946 MA21-16093