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Global Business Consulting

NC STATE Poole College of Management
Enterprise Risk Management Initiative

2022 & 2031

EXECUTIVE PERSPECTIVES ON TOP RISKS

Key issues being discussed in the boardroom and C-suite | **Executive Summary**

Research Conducted by NC State University's ERM Initiative and Protiviti

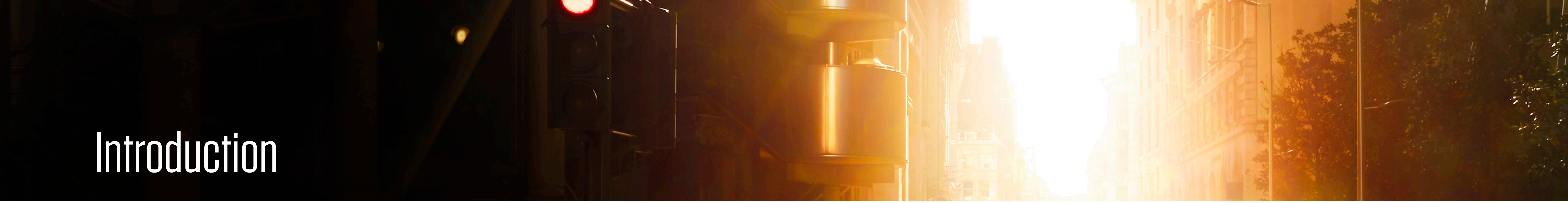
Key Highlights From This Study

Major themes for 2022 and 2031

- The scope of global top risks is more expansive.
- People and culture are at the top of the agenda.
  - Job markets have been disrupted and executives are concerned about the viability of succession plans and attracting/retaining talent and labor.
  - Diversity, equity and inclusion have elevated in importance.
  - Future of work continues to be a defining business challenge for the next decade.
  - Workplace evolution is creating uncertainty around how to operate and sustain the culture.
  - Resistance to change is both a near-term and long-term concern.
  - Most ESG matters rate highly with respect to the “S”; climate change concerns are greatest in industries heavily reliant on fossil fuels.
- Buckle up; a disruptive and volatile decade lies ahead.
- Economic uncertainty remains significant and its long-term impact has increased.
- Reliable and predictive market intelligence will separate winners and losers.
- Cybersecurity and data privacy remain long-term concerns, as do regulatory matters.
- A long-term outlook helps companies be better prepared and more resilient.

TOP RISKS FOR 2022
1. Pandemic-related government policies and regulation impact business performance
2. Succession challenges, ability to attract and retain top talent
3. Pandemic-related market conditions reduce customer demand
4. Adoption of digital technologies requires new skills or significant efforts to upskill/reskill existing employees
5. Economic conditions, including inflationary pressures, constrain growth opportunities
6. Increasing labor costs impact profitability targets
7. Resistance to change operations and the business model
8. Inability to utilize data analytics and “big data” to achieve market intelligence and increase productivity and efficiency
9. Cyber threats
10. Shifts in expectations about social issues and diversity, equity and inclusion (DEI) outpace organization’s response

TOP RISKS FOR 2031
1. Adoption of digital technologies requires new skills or significant efforts to upskill/reskill existing employees
2. Succession challenges, ability to attract and retain top talent
3. Rapid speed of disruptive innovation outpaces our ability to compete
4. Substitute products or services arise that affect our business model
5. Economic conditions, including inflationary pressures, constrain growth opportunities
6. Entrance of new competitors and other industry changes threaten market share
7. Impact of regulatory change and scrutiny on operational resilience, products, and services
8. Resistance to change operations and the business model
9. Hybrid work environment and changes in nature of work challenge ability to compete
10. Inability to utilize data analytics and “big data” to achieve market intelligence and increase productivity and efficiency



Introduction

Ongoing challenges triggered by a once-in-a-century airborne pandemic continue to unfold and, combined with numerous other risk issues, serve to remind executives that the range of uncertainties has triggered an overwhelming landscape of ever-changing risks that they must manage. Staying abreast of emerging risk issues and opportunities is becoming increasingly difficult.

Boards of directors and executive management teams cannot afford to manage risks casually on a reactive basis, especially considering the rapid pace of disruptive innovation and technological developments in a rapidly advancing digital world. The need for resilience and agility at pivoting when the unexpected occurs is at all-time highs.

Protiviti and NC State University's ERM Initiative are pleased to provide this report focusing on the top risks currently on the minds of global boards of directors and executives. This report contains results from our 10th annual risk survey of directors and executives worldwide to obtain their views on the extent to which a broad collection of risks is likely to affect their organizations over the next year — 2022. In addition to insights about near-term risks in 2022, we also asked respondents to consider how these risks will affect their organizations a decade from now (in 2031).

Our respondent group of 1,453 executives, comprised primarily of board members and C-suite executives from all major regions of the world, provided their perspectives about the potential impact in 2022, and also in 2031, of 36 specific risks across three dimensions:[1]

- **Macroeconomic risks** likely to affect their organization's growth opportunities
- **Strategic risks** the organization faces that may affect the validity of its strategy for pursuing growth opportunities
- **Operational risks** that might affect key operations of the organization in executing its strategy

This executive summary provides a brief description of our methodology and an overview of the overall risk concerns for 2022 and 2031, followed by a review of the results by type of executive position. It concludes with a call to action offering a discussion of questions executives may want to consider as they look to strengthen their overall risk assessment and management processes.

Our full report (available at erm.ncsu.edu or protiviti.com/toprisks) contains extensive analysis of key insights about top risk concerns across a number of different dimensions, including a breakdown by industry, size of company, type of ownership structure, and geographic locations of company headquarters.

[1] One new risk was added in the 2022 survey. We added six new risks in 2021. These new risks are specifically focused on the effects of the COVID-19 pandemic and on the social and economic challenges in the last two years. See Table 1 for a list of the 36 risks addressed in this study.

About the Survey

We are pleased with the global reach of our survey this year, with strong participation from 1,453 board members and executives across a variety of industries.

Our survey was conducted online in September and October of 2021 to capture perspectives on 36 risks on the minds of executives as they peered into 2022. Each respondent was asked to rate 36 individual risk issues in terms of their relative impact using a 10-point scale, where a score of 1 reflects “No Impact at All” and a score of 10 reflects “Extensive Impact” to their organization over the next year. We also asked them to consider how each of these risks were likely to affect their organizations 10 years in the future (i.e., in 2031).

For each of the 36 risk issues, we computed the average score reported by all respondents. Using mean scores across respondents, we rank-ordered risks from highest to lowest impact. This approach enabled us to compare mean scores across the past three years to highlight changes in the perceived level of risk. Consistent with our prior studies, we grouped all the risks based on their average scores into one of three classifications:

CLASSIFICATION	RISKS WITH AN AVERAGE SCORE OF
Significant Impact	6.0 or higher
Potential Impact	4.5 through 5.99
Less Significant Impact	4.49 or lower

With regard to the respondents, we targeted our survey to individuals currently serving on the board of directors or in senior executive positions so that we could capture C-suite and board perspectives about risks on the horizon for 2022 and 2031. Respondents to the survey serve in a number of different board and executive positions.

EXECUTIVE POSITION	NUMBER OF RESPONDENTS
Board of Directors (BD)	241
Chief Executive Officer (CEO)	267
Chief Financial Officer (CFO)	135
Chief Risk Officer (CRO)	180
Chief Audit Executive (CAE)	149
Chief Information/Technology Officer (CIO/CTO)	201
Chief Strategy/Innovation Officer (CSO)	59
Chief Data/Digital Officer (CDO)	57
Other C-Suite[2] (OCS)	56
All Other[3]	108
Total number of respondents	**1,453**

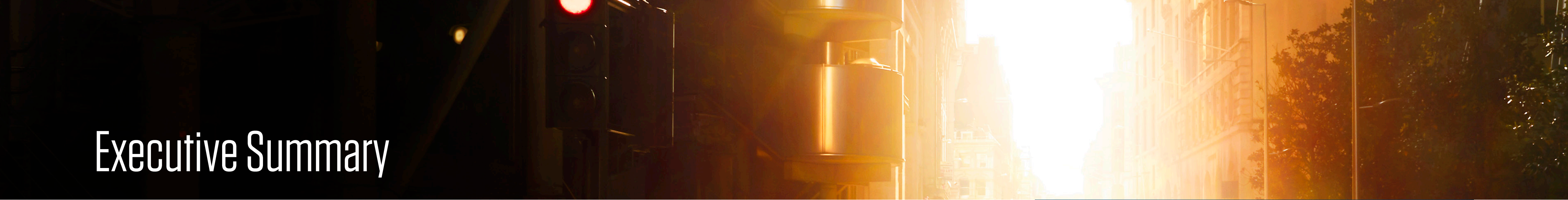
"We thank the global participants who shared their views and made this year's survey possible, as their collective input reinforces what many business leaders are experiencing the world over. We hope that the insights and recommendations in our study provide a catalyst for dialogue in organizations all over the world around managing change and disruption."

PAT SCOTT
Executive Vice President, Global Industry, Client Programs and Marketing, Protiviti

In our full report (available online at erm.ncsu.edu and protiviti.com/toprisks), we analyze variances across different sizes and types of organizations, industry and respondent position, in addition to differences among organizations based in North America, Europe, Australia/New Zealand, Asia, Latin America, India, Africa and the Middle East. Page 31 provides more details about our methodology. This executive summary highlights our key findings.

[2] This category includes titles such as chief operating officer, general counsel and chief compliance officer.

[3] These 108 individuals either did not provide a response allowing for classification by position or would best be described as middle management or business advisers/consultants. We do not provide a separate analysis for this category.



Executive Summary

Massive disruptions in the global supply chain. Challenges in attracting and retaining talent to address needs all across the enterprise. COVID-19 variants. Cyber attacks and ransomware. Wildfires and flooding. Geopolitical tensions in specific regions and shifts on issues related to climate change. Long-overdue shifts in expectations related to diversity, equity and inclusion. Political divisiveness and gridlock. Artificial intelligence (AI), automation and other rapidly developing digital technologies. More permanent shifts to hybrid and remote work environments. Shifting customer preferences and demographics. Big data analytics.

The global marketplace is dramatically impacted by these and a host of other notable risk drivers triggering significant levels of uncertainties that make it extremely difficult for an organization's leaders to anticipate what risks may lie just over the horizon. Unanticipated events are unfolding at record pace, leading to massive challenges to identify the best next steps for organizations of all types and sizes, regardless of where they reside in the world. As no one is immune to uncertainty, C-suites and boards need to be vigilant in scanning the horizon for emerging issues. Because it is impossible to anticipate everything of significance that lies in the future, organizations must focus on building trust-based, resilient cultures that can pivot at the speed of change.

One of the first questions an organization seeks to answer in risk management is, "What are our most critical risks?" The organization's answer to this question lays the foundation for management to respond with appropriate capabilities for managing these risks. This survey provides insights about top risks for the short term — 2022 — and the long term — 2031 — from 1,453 respondents in C-suite and board positions in organizations around the globe.

The top risks on the minds of all executives for 2022 are summarized in the sidebar.

TOP RISKS FOR 2022

1. Pandemic-related government policies and regulation impact business performance
2. Succession challenges, ability to attract and retain top talent
3. Pandemic-related market conditions reduce customer demand
4. Adoption of digital technologies requires new skills or significant efforts to upskill/reskill existing employees
5. Economic conditions, including inflationary pressures, constrain growth opportunities
6. Increasing labor costs impact profitability targets
7. Resistance to change operations and the business model
8. Inability to utilize data analytics and "big data" to achieve market intelligence and increase productivity and efficiency
9. Cyber threats
10. Shifts in expectations about social issues and diversity, equity and inclusion (DEI) outpace organization's response

Last year, we expanded our analysis to obtain insights about long-term risk perspectives on the minds of executives by asking them to rate these same 36 risks with regard to the expected impact on their organizations a decade later. This year, we asked participants to look ahead to the year 2031.

> "With the scope of risk issues expanding and shifting, an adaptive and resilient culture and mindset are needed to manage the accelerating pace of change as customer preferences evolve, digital transformation accelerates, the nature of work and the workplace itself are disrupted, new competitors enter the market, laws and regulations change, fresh cyber threats emerge, and the focus on ESG stakeholder expectations and ever-changing geopolitical dynamics add additional uncertainty to the picture."
>
> **MARK BEASLEY**
> Professor of Enterprise Risk Management,
> Poole College of Management, NC State University

The top risks on the minds of all executives for 2031 are summarized in the sidebar.

TOP RISKS FOR 2031

1. Adoption of digital technologies requires new skills or significant efforts to upskill/reskill existing employees
2. Succession challenges, ability to attract and retain top talent
3. Rapid speed of disruptive innovation outpaces our ability to compete
4. Substitute products or services arise that affect our business model
5. Economic conditions, including inflationary pressures, constrain growth opportunities
6. Entrance of new competitors and other industry changes threaten market share
7. Impact of regulatory change and scrutiny on operational resilience, products, and services
8. Resistance to change operations and the business model
9. Hybrid work environment and changes in nature of work challenge ability to compete
10. Inability to utilize data analytics and "big data" to achieve market intelligence and increase productivity and efficiency

Analysis of the top risks for 2022 and the next decade reveals a number of key takeaways pointing to shifting priorities:

The scope of global top risks is more expansive. The spread between the top risk and, say, the 15th-rated risk over the next 12 months has narrowed considerably compared to prior years. The scope of risk concerns for the next 10 years pertains to the future of work and the workplace; talent acquisition, retention and succession; disruptive innovation, new competitors and sustaining customer loyalty; the economy; regulatory change; utilizing data analytics and "big data"; and organizational culture and the impact of a hybrid work environment. There is a lot on the plate.

Near-term priorities appear to be shifting. Many of the same risks remain top of mind this year as last year; however, the way risks are being prioritized is changing. Looking out 12 months, three risks fell out of last year's top 10 – concerns pertaining to regulatory matters, competition with "born digital" companies and data privacy, falling to 12th, 15th and 21st, respectively. New additions to the top 10 risks list for 2022 center around talent challenges including concerns about anticipated increases in labor costs, the inability to utilize data analytics and "big data," and shifts in DEI-related perspectives and expectations, which were rated 23rd, 11th and 16th in last year's survey, respectively. In addition, there are shifts within the top 10 risks, the most notable being talent management and succession, which jumped from the eighth-ranked risk last year to second for 2022.

Longer-term priorities are also shifting. Looking out over the next decade, four risks dropped out of last year's top 10 list for 10 years ahead — risks associated with data privacy, sustaining customer loyalty, cybersecurity and competition with "born digital" players, falling to 11th (tie), 16th and 18th, respectively. New to the top 10 risks list for the next decade are concerns over the economy, ease of entrance of new competitors, resistance to change, and the effect of changes in the overall work environment on sustaining organizational culture and the manner in which operations are conducted. There is also evidence of shifting long-term priorities within the top 10 risks, the most notable being regulatory concerns, which dropped from the second-rated risk in last year's 10-year outlook to seventh overall in this year's 10-year outlook.

People and culture are at the top of the agenda. The number two risk overall for both 2022 and the next decade pertains to succession challenges and the ability to attract, retain and develop top talent in a tightening market. In addition, culture remains a priority. Concerns with resistance to change represent the seventh- and eighth-rated risks overall for 2022 and the next decade, respectively. Talented people and culture are related, as the latter attracts the former and, effectively led, the best and brightest engender innovative cultures fit for purpose in the digital age. There are several important themes related to people and culture:

- **Job markets have been disrupted.** In some countries, resignations and job openings are at or near record highs, terminations are at or near record lows, and/or hirings cannot keep pace with job openings. There is a need for specialized skills in an increasingly complex world.
- **Rising labor costs is the sixth-ranked risk for 2022.** The pandemic has spawned increased mobility in the workforce — including but not limited to changing locations and industries. Companies have open positions they are struggling to fill. People are less willing to work for minimum wage. This risk zoomed upward from 23rd in 2021 to sixth for 2022. Clearly executives are concerned about attracting and retaining talent and labor and must meet the table stakes the market requires to do so. The hardest hit include the retail, restaurant, leisure and hospitality sectors.
- **DEI has elevated in importance.** Shifts in perspectives and expectations about social issues and priorities surrounding DEI — the 10th rated risk overall for 2022 and 15th overall for the next decade — are forcing assessment of policies and processes around recruiting, retention, career advancement and reward systems, as well as consideration of such topics as digital equity and virtual inclusion. It is also requiring companies to engage the investor community and address rising expectations in ESG reporting.
- **Future of work continues to be a defining business challenge for the next decade.** Our survey results for this year and the prior year both indicate this risk is the fourth-ranked issue looking out 12 months and the top risk for the ensuing decade. Adoption of AI, automation in all of its forms, natural language processing, visual recognition software, virtual reality simulations and other digital advances are expected to displace as well as create millions of job functions. As the labor pool remains limited and labor costs rise, the business case for automating repetitive manual activities becomes more compelling. Thus, the state of labor markets is such that companies will need to take the initiative to upskill/reskill existing employees on a regular basis to fulfill the value proposition of new technological investments. The talent needed will not be found walking the streets.
- **Workplace evolution is creating uncertainty and the need for agility.** The pandemic accelerated trends that were already underway — specifically relating to

On page 26 of this executive summary, we pose key questions as a call to action for board members and executive management to consider that can serve as a diagnostic to evaluate and improve their organization's risk assessment process.

remote work, e-commerce and automation. They have empowered many employees — particularly those whose physical presence in interacting with people and machines is not required at a specific location or in a specified environment — by giving them a desire for a voice and choice as to where and when they work, leading to various forms of a hybrid work environment for many companies. No one knows for sure what the post-pandemic norm will look like, and the number of companies implementing permanent work-from-anywhere policies continues to grow. More importantly, there is uncertainty over the impact of these changes on sustaining organizational culture and the way business is done. This is the ninth-rated overall risk concern looking out 10 years.

- **Most ESG issues rate highly with respect to the "S."** As noted above, people, culture and workplace issues are significant risks overall according to our survey. DEI-related challenges are a top 10 risk overall for 2022. There are risks associated with organizational culture, including resistance to change and the impact of the evolving workplace.
- **Climate change concerns are greatest in industries heavily reliant on fossil fuels.** Overall, climate change concerns represent one of the five risks reflecting the largest increases in severity between years. Oil and gas and power companies generating energy utilizing fossil fuels rate climate concerns as a top risk. Most other respondents do not perceive significant alterations in their strategy and business model for climate change as a near-term concern at this time, although the risk heightens looking out 10 years. This finding does not suggest climate change isn't an important matter to these respondents; it simply alludes to the current perception of many C-suite executives and board members outside of fossil fuels-based industries that climate issues will not significantly impact their organization's strategy and business model. Investor expectations, customer preferences, regulatory requirements and other market developments could change that perception. Interestingly, a lack of focus on greenhouse gas-emitting activities could pose additional talent retention challenges, especially with respect to younger generations.

> "Last year, we referred to the future of work as one of the defining business challenges of the disruptive 2020s. This year, we're doubling down on that prediction. Not only is this risk the top issue for the next decade for the second straight year, but the increasing cost of labor and acute talent shortages are making the business case for automating manual-intensive activities more compelling."
>
> **KIM BOZZELLA**
> Global Leader, Technology Consulting, Protiviti

Concerns with the global pandemic continue to linger near term. COVID-19 variants and the inability to vaccinate enough people in some countries or provide sufficient doses of vaccines to other countries have sustained the pandemic, hamstringing recovery efforts and dampening economic growth sentiments. The root cause for two of the top five risks overall for 2022 are pandemic-related and involve leadership concerns about government policies significantly impacting business performance and pandemic-imposed market conditions continuing to impact consumer behavior and demand for products and services.

Buckle up; a disruptive and volatile decade lies ahead. The rapid speed of disruptive innovation, threat of substitute products and services, and ease of entrance of new competitors into the industry are all top risks looking out 10 years. Most of these risks were ranked higher over the next decade than for 2022. For example, disruptive innovation, substitute products, ease of entrance of new competitors, and sustaining customer loyalty and retention were rated third, fourth, sixth and 12th, respectively, for the next decade, whereas for 2022 they were rated 19th, 26th, 24th and 23rd, respectively. Combined with other risks related to talent, the workplace and organizational culture, and the economy, these risks portend a disruptive decade ahead.

Economic uncertainty remains significant and its long-term impact has increased. Concerns over the economy are fifth overall for both 2022 and the next decade. While the economy was a top 10 risk looking 12 months out last year, it was rated 16th last year overall when the focus was on the next decade. The lingering effects of the pandemic, uncertainty over both central bank policies and the long-term effects of unprecedented government deficits, constricting labor markets, the debate over inflation being transitory or structural, the ripple effects of rising energy costs, the continued erosion in consumer economic sentiment in some countries, and impact of supply chain congestion, disruption and related cost increases contribute to strained perceptions regarding the economy, presently and in the future.

Reliable and predictive market intelligence will separate winners and losers. Inability to utilize sufficiently advanced and predictive data analytics and "big data" to achieve actionable market intelligence and increase productivity, efficiency and innovation is a top risk, rated eighth and 10th overall for 2022 and the next decade, respectively. In rapidly changing markets, ongoing insightful and predictive analysis of data wins — particularly with respect to changing customer preferences.

Cybersecurity and data privacy remain long-term global concerns, as do regulatory matters. Cybersecurity is the ninth- and 16th-rated risk overall for 2022 and the next 10 years, respectively. A critical risk for a long time continues to be top of mind as nation-states, cyber criminals and others evolve new attack strategies.

Interestingly, data privacy is the 11th-rated risk for the next decade and is not rated among the top risks for 2022, reflecting recent emphasis on privacy due to regulatory developments and revealing it may be a longer-term strategic concern for respondents in terms of determining what data is captured and how that data is stored, used and secured.

In addition, concerns over regulatory scrutiny affecting the way processes are designed and products or services are produced or delivered are more long term, as this risk is rated seventh overall for the next decade but, interestingly, is not a top 10 risk looking out 12 months for the first time since we began this annual survey 10 years ago. This may suggest that respondents see gridlock and other public sector priorities as mitigating factors to regulatory changes affecting their business near term. But longer term, they see regulatory risk as an issue. For example, world leaders recently endorsed a global minimum tax of 15 percent on business profits to curb efforts to shift corporate profits to overseas tax havens.

A long-term outlook helps companies be better prepared and more resilient. Seven of the top 15 risks over the next decade are not in the top 15 list for 2022. With a disruptive decade ahead, organizations embracing the long view with a trust-based culture, effective utilization of predictive data analytics and the ability to pivot at the speed of change are more likely to sustain their relevance. A longer-term perspective helps leaders "reality test" their assumptions about markets and the business environment so that they are more prepared for unexpected surprises as well as more decisive and agile in making timely adjustments to the strategy and business model. It can reveal a number of different challenges than those that may be emerging short-term. Thinking long term about enterprise risks can impact long-term resiliency and preparedness for the next decade, complementing the organization's short-term risk awareness.

> "The utilization of focused data analytics to achieve reliable and predictive market intelligence and increase productivity, along with the risk and opportunity associated with disruptive innovation, have both increased in importance for 2022 and the next 10 years. These survey results are interrelated as organizations will need to 'think differently' and empower digital investments in the highest-impact strategic initiatives that connect to the experience enhancements that customers value most."
>
> **JOAN SMITH**
> Global Leader, Protiviti Digital

In addition to providing insights from the full sample about executive perspectives on risks for the short term (2022) and long term (a decade later — 2031), we conduct a number of separate analyses by examining different subsections of our sample. Here are some high-level insights:

Differences across sizes of organizations

- Executives from smaller organizations perceive the overall risk environment for 2022 to be higher than 2021; however, executives from all other sizes of organizations assess the risk environment for 2022 as lower relative to 2021. The largest two sizes of organizations perceive the overall risk environment for 2022 as somewhat lower than what they thought pre-pandemic (our 2019 survey looking forward to 2020), while the categories of smaller organizations (those under $1B) still view 2022 as riskier than pre-pandemic times.

- Risks triggered by the ongoing pandemic are top of mind for executives of all sizes of organizations. Concerns about economic conditions in 2022 appear as a top five risk for three of the four size categories.
- All organizations except the largest ones are focused on risks related to succession challenges and their ability to attract and retain top talent. Larger organizations represented by the top two size categories are concerned about their abilities to acquire and keep the talent they need to adopt and implement digital technologies and innovations.
- Small organizations, represented by the two smaller size categories, are particularly concerned about government policies surrounding public health practices, social distancing, return-to-work, crowd limits, and other pandemic-related regulations and protocols, which may significantly impact their performance. This was the number one 2022 risk concern for these smaller organizations.
- As business leaders look ahead to 2031, the top five risks are mostly of a strategic nature. All sizes of organizations share concerns about the adoption of digital technologies (e.g., AI, automation in all its forms, natural language processing, visual recognition software, virtual reality simulations) in the marketplace and their ability to locate and/or upskill and reskill existing employees. This was the number one 2031 risk concern for the three largest size groups, and second for the smallest group of organizations.
- All four sizes of organizations include the risk of succession challenges and the ability to attract and retain top talent in a tightening talent market as a top five 2031 risk concern.

Differences across executive positions represented

- There are varying views across different executive groups about the overall risk environment for 2022. Board members, chief risk officers (CROs), chief audit executives (CAEs) and chief data/digital officers (CDOs) have significantly decreased their 2022 risk expectations relative to 2021. In contrast, chief executive officers (CEOs), chief financial officers (CFOs), and chief information/technology officers (CIOs/CTOs) have the highest 2022 rating on this dimension. The increase is most dramatic for CEOs, jumping from 5.6 (the lowest rating) in 2021 to 6.6 in 2022 (the highest rating). Clearly there are differences of opinion about the overall risk environment.
- There is marked contrast in perspectives about specific risk concerns across the various positions. This suggests there may be significant value in explicit discussions of overall impressions about the risk environment among key leaders, especially at the highest levels of the organization.
- The number of the 36 risks rated as "Significant Impact" risks for 2022 was about the same as in 2021 for board members, CFOs, CAEs, and Other C-Suite executives. However, the number of "Significant Impact" risks for CEOs increased from four in 2021 to 13 in 2022. That begs the question, "Who has the correct assessment of these risks?" Business leaders need to engage in robust conversations to tease out the underlying realities.
- Boards of directors and CEOs are both concerned about the impact of government policies surrounding public health practices, social distancing, return to work timetables, and crowd limits, and about market conditions imposed by and in response to COVID-19. Both rated those risks as their top two risk concerns.
- CFOs, CIOs/CTOs, and chief strategy/innovation officers (CSOs) are especially concerned about ongoing demands on or expectations of a significant portion of the workforce to "work remotely" or increased expectations for a transformed, collaborative hybrid work environment. Operational risks dominate the top five risk concerns for CAEs.
- Longer-term risk concerns from all executives reveal an overall reduction in risk concerns for 2031 across the board in relation to concerns over the short term. Only four of our position groups rate any of the 36 risks as "Significant Impact" risks for 2031. Perhaps the less immediate impact of these potential risk issues is driving this difference in risk perspectives for the next decade, for the passage of time enables organizations to make adjustments they may be

unable to make over the near term. But, it is important to note that CEOs rated 10 risks as "Significant Impact" risks for 2031. CEOs are viewing the risk landscape differently.

- Interestingly, the CIO/CTO position group rated almost half (17 of 36) of the risks as "Significant Impact" risks for 2022; however, they rated none of the 36 risks at that level for 2031.

> "An interesting aspect of our annual study is the differing points of view among the participating executives and directors regarding the magnitude and severity of risks. The disparity noted in our results suggests the need for dialogue at the highest levels of an organization to ensure that everyone is on the same page about the most important risks that should command the organization's focus and resources."
>
> **BRUCE BRANSON**
> Professor of Accounting and Associate Director of Enterprise Risk Management Initiative, Poole College of Management, NC State University

Differences across industry groups

- Respondents across all industry groups, with the exception of the Technology, Media and Telecommunications industry group, perceive the overall magnitude and severity of risks in the environment as a whole to be lower for 2022 relative to 2021.
- There is a marked contrast in perspectives across industry groups about specific risk concerns, which suggests that the industry context is important to consider. But given that a number of organizations' business models may not fit neatly into an industry category, reviewing differences in risk concerns across multiple industries may help tease out risks that may be overlooked by some.
- There is significant disparity in the top five risks as opposed to previous years' surveys. The following industry groups all rate the macroeconomic risk of government policies surrounding public health practices as their top risk for 2022: Consumer Products and Services; Technology, Media and Telecommunications; and Healthcare. The other three industry groups all identify different top risks.
- Financial services organizations cite concerns about the interest rate environment as their top concern. Respondents from the Manufacturing and Distribution industry group identified risks tied to uncertainty surrounding the organization's core supply chain as their top concern, while those from Energy and Utilities identified risks related to succession challenges and the ability to attract and retain talent as their top risk concern. Note: While Energy and Utilities is the only industry group to list succession challenges as the top risk concern, every industry has that risk in its top five list of risks.
- The Energy and Utilities industry group is the only group to identify concerns related to a growing focus on climate change policies, regulations and expanding disclosure requirements as a top five issue for either 2022 or 2031. This is a top five risk issue for that industry group for both 2022 and 2031. But, no other industry group rated that risk in its top five risks for either the short-term or longer-term time horizons. Thus, the perception that climate change is likely to impact strategies and business models is paramount for Energy and Utilities, but not so much for the other industry groups.
- The Healthcare industry group indicates the highest levels of risk concerns for 2022. Four of its top five risks for 2022 are rated at the "Significant Impact" level, while most other industry groups rate only one of their top five risks at that level (the Financial Services industry group rates two of their top five risks at that level).
- Strategic and macroeconomic risks dominate most longer-term risk forecasts. The risk related to the adoption of digital technologies requiring the need to upskill and reskill employees is cited as the first or second highest risk by five of the six industry groups for 2031. In addition, the strategic risk associated with the rapid speed of disruptive innovation is ranked by five of the industry groups as a top five risk.

> "As we look forward over the next decade, organizations had best be prepared and ready to pivot. Companies should organize for speed, keep an eye on relevant trends and industry developments, deploy data-informed approaches to understand customer behavior, incent necessary changes to processes, products and services, and invest in the talent that can make it happen."
>
> **JIM DELOACH**
> Managing Director, Protiviti

Differences across geographic regions

- Globally, organizations from six of the eight geographic regions in our study agree that the overall magnitude and severity of risks are of a "Significant Impact" level in 2022. Only organizations in Asia and the Middle East rate the level of risk below the "Significant Impact" threshold.
- Respondents in Europe, Australia/New Zealand and Africa organizations rate the severity and magnitude of risks in 2022 as higher than 2021. North American organizations and those in Asia and the Middle East rate the magnitude and severity in 2022 as lower relative to 2021.
- There are notable differences in views about risks around the globe, which is especially important for multinational organizations to consider. Organizations in Australia/New Zealand and Africa rate all five risks as "Significant Impact" risks whereas organizations in North America rated none of their risks as "Significant Impact" risks.
- There is variation in the nature and types of risks included in the top five risks for the eight geographic regions. Eighteen of the 36 risks appear in at least one geography's top five list of risks. Only two risks are common to at least four of the eight regions.
- The risk related to government policies surrounding public health practices or market conditions imposed by and in response to COVID-19 was included as a top five risk for every geographic region last year. But, for 2022 that risk is not in the top five for Europe or the Middle East.
- Looking further out into 2031, strategic risks become more heightened for all regions with the exception being India.
- The concern for 2031 over rapid speed of disruptive innovation is cited by five of the eight regions, while the macroeconomic risk associated with the adoption of digital technologies that may require new skills or significant efforts to upskill/reskill existing employees is cited by four of the regions.

Differences across public and non-public entities

- Privately held for-profit entities sense an overall heightened magnitude and severity of risks for 2022, but public companies and not-for-profit and governmental organizations perceive the level to be lower relative to 2021.
- The top five risks across the three groups are reasonably consistent. All three groups rank risks associated with government policies surrounding public health practices and succession planning and talent acquisition among their top five risks.
- Market conditions associated with COVID-19, economic conditions in markets currently served, preparation to manage cyber threats and the adoption of digital technologies are cited by at least two of the three types of organizations. Not-for-profit and governmental organizations are alone in citing resistance to change as a top five risk concern.
- All organizations are concerned about the adoption of digital technologies impacting the need for new skills for 2031, with all three groups rating that risk as their top risk concern. Both privately held for-profit organizations and not-for-profit and governmental organizations rate that risk as a "Significant Impact" risk for 2031. Additionally, there are universal concerns about succession and talent challenges for each of the three types of organizations.

Plans to improve risk management capabilities

In addition to asking respondents to rate each of the 36 risks for 2022 and 2031, we asked them to provide insights about plans to enhance their organization's risk management capabilities in the coming year. Here are some key insights:

- In contrast with the finding that respondents note a decrease in their impression about the magnitude and severity of overall risks for 2022 relative to the prior year, they indicate a higher likelihood of deploying more resources to risk management in 2022 relative to 2021 (and 2020). This result is not too surprising, especially in light of the past two years of pandemic-related risk concerns shining the spotlight on the importance of resilience in the face of unexpected surprises.
- The three largest-sized groups of organizations all indicate plans to strengthen their risk management processes in 2022 as compared to 2021. All but the smallest firms indicate a higher level of investment in risk management processes for 2022.
- Interestingly, boards of directors, CEOs, CIOs/CTOs, and Other C-Suite executives all signal increased investment in risk management in the coming year.
- The Healthcare and Energy and Utilities industry groups express reduced likelihood to devote additional time and resources toward risk management in 2022 relative to 2021. This may simply reflect increased investments already made in 2021, as indicated by last year's findings. The Financial Services industry group leads in both absolute terms for 2022 (6.9) and in the magnitude of the increase from 2021 expectations (an increase of 0.8). The Consumer Products and Services, Manufacturing and Distribution, and Technology, Media and Telecommunications industry groups all indicate a higher likelihood to invest more in risk management capabilities in 2022 relative to 2021.
- Organizations based in Australia/New Zealand, Africa, North America and Europe indicate the greatest likelihood they will invest more in risk management capabilities in 2022 relative to our 2021 results.
- Public companies and privately held for-profit organizations indicate higher levels of likelihood that they will invest more time and resources in building out their risk management infrastructure in 2022 relative to 2021. On the other hand, not-for-profit and governmental organizations indicate no change in the level of investment in risk management capabilities in 2022 when compared to 2021.

The list of top 10 global risks for 2022 and 2031, along with their corresponding scores for the prior year(s), are presented on the following pages, along with an assessment of perceived impact by executive position.

The ever-changing risk landscape and the overall perceived magnitude and severity of risks should prompt boards and senior executives to closely scrutinize the approaches they use to keep an anticipatory eye on emerging risks. Unfortunately, some organizations continue to manage risks the way they have for many years, even though the profile of risks is changing dramatically as business and whole industries are transformed in the digital economy.

> "All three organization types we examined — public companies, privately held for-profit companies, and not-for-profit and governmental organizations — included in their top five risks for 2022 concerns relating to restrictive government public health policies, leadership succession, and the acquisition and retention of talent. As for the outlook over the next decade, succession and talent issues were also top of mind for all three organization types in addition to concerns about the future of work."
>
> **DON PAGACH**
> Professor of Accounting, Director of Research, Enterprise Risk Management Initiative, Poole College of Management, NC State University

This executive summary provides insights for 2022 and 2031 from 1,453 respondents in C-suite and board positions in organizations around the globe. The full report on this study (available online at erm.ncsu.edu and protiviti.com/toprisks) includes our in-depth analysis of perceptions about specific risk concerns. We identify and discuss variances in the responses when viewed by organization size, type, industry and geography, as well as by respondent role. In addition, on page 26 of this executive summary, we pose key questions as a call to action for board members and executive management to consider that can serve as a diagnostic to evaluate and improve their organization's risk assessment and management processes.

Our plan is to continue conducting this risk survey annually so that we can stay abreast of key risk issues on the minds of directors and executives across the globe and observe trends in risk concerns over time. It is our desire that this report will increase executive and board understanding of potential risks on the horizon so that they can proactively navigate issues and challenges as they emerge for the benefit of their organization's reputation and brand image, key stakeholders, and society as a whole.

"Our global results indicate that the longer-term focus in Europe, North America and Asia is on people, technology and the competitive environment and, to some extent, regulatory developments. The other five regions we addressed in our survey pick up on one or more of these themes while also emphasising priorities unique to the region. A common driver is disruptive change. While they may be facing a different mix of issues, a distinguishing factor for the most successful companies will be their ability to adapt to changing realities."

JONATHAN WYATT
Managing Director, European Regional Leader, Protiviti

The Top Risk Concerns for 2022 and 2031

The list of top 10 global risks, as noted by all survey participants, for 2022 appears in Figure 1, along with their corresponding 2021 and 2020 scores (for those risks included in the prior years' surveys).

Top 10 risks for 2022

FIGURE 1

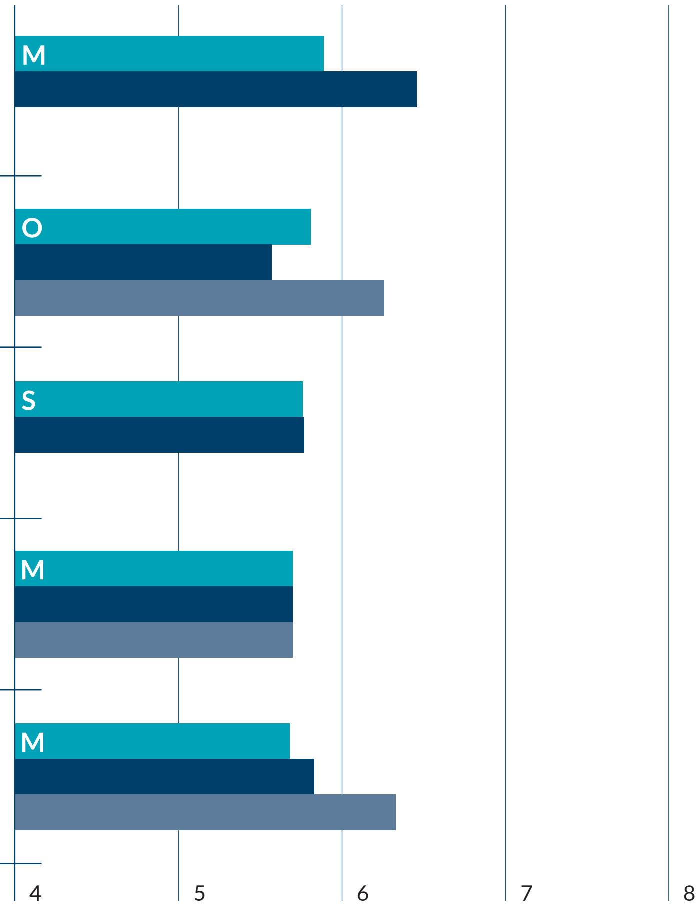
Government policies surrounding public health practices, social distancing, return-to-work, crowd limits, and other pandemic-related regulations and protocols may significantly impact the performance of our business

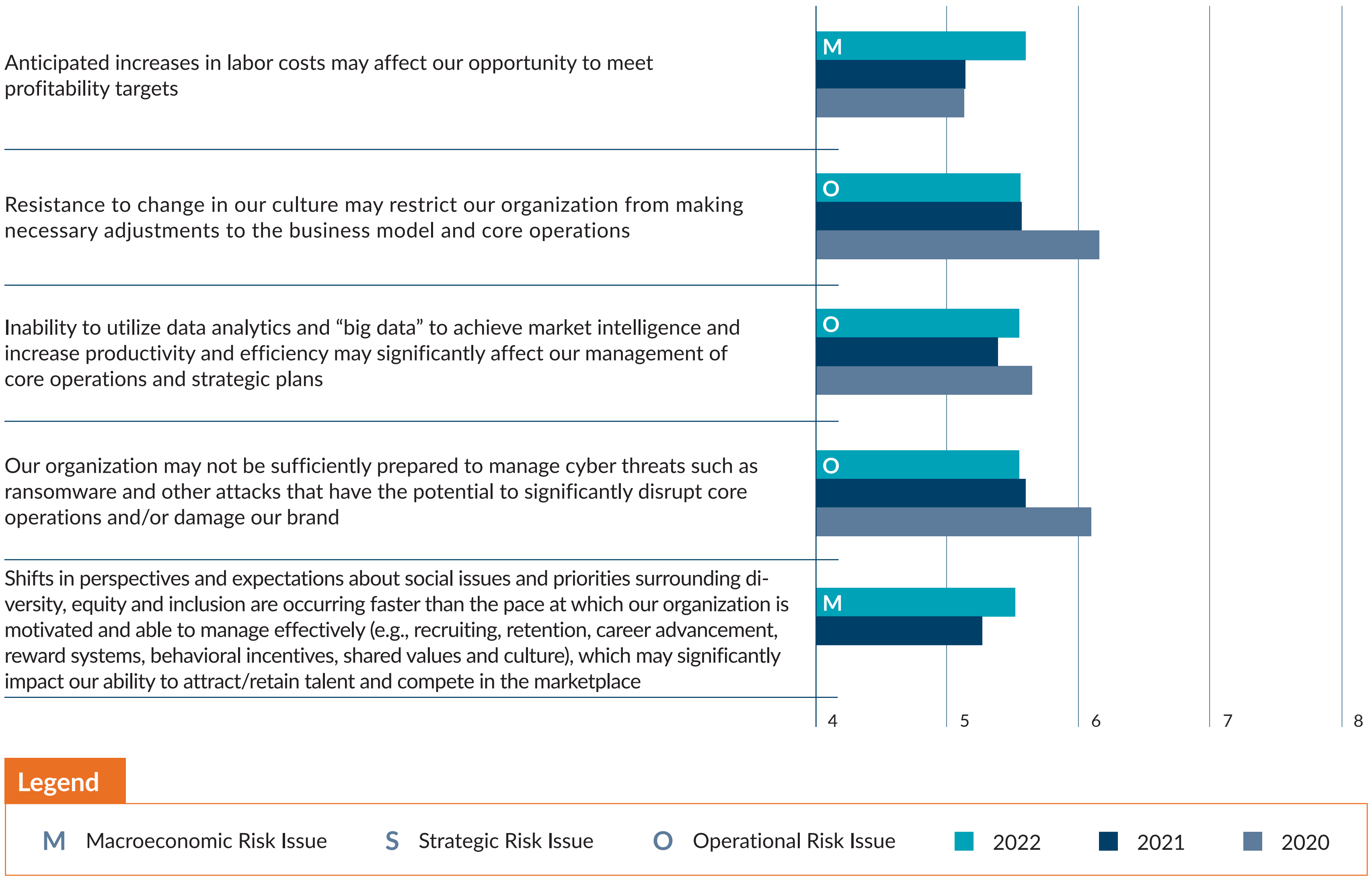
Our organization's succession challenges and ability to attract and retain top talent in a tightening talent market may limit our ability to achieve operational targets

Market conditions imposed by and in response to COVID-19 and emerging variants, including shifts in consumer behavior to digital channels, may continue to impact customer demand for our core products and services

The adoption of digital technologies (e.g., artificial intelligence, automation in all of its forms, natural language processing, visual recognition software, virtual reality simulations) in the marketplace and in our organization may require new skills that either are in short supply in the market for talent or require significant efforts to upskill and reskill our existing employees

Economic conditions (including inflationary pressures) in markets we currently serve may significantly restrict growth opportunities or impact margins for our organization




Anticipated increases in labor costs may affect our opportunity to meet profitability targets
M
Resistance to change in our culture may restrict our organization from making necessary adjustments to the business model and core operations
O
Inability to utilize data analytics and "big data" to achieve market intelligence and increase productivity and efficiency may significantly affect our management of core operations and strategic plans
O
Our organization may not be sufficiently prepared to manage cyber threats such as ransomware and other attacks that have the potential to significantly disrupt core operations and/or damage our brand
O
Shifts in perspectives and expectations about social issues and priorities surrounding diversity, equity and inclusion are occurring faster than the pace at which our organization is motivated and able to manage effectively (e.g., recruiting, retention, career advancement, reward systems, behavioral incentives, shared values and culture), which may significantly impact our ability to attract/retain talent and compete in the marketplace
M
4
5
6
7
8
Legend
M Macroeconomic Risk Issue
S Strategic Risk Issue
O Operational Risk Issue
2022
2021
2020

The top 10 global risks for 2031 appear in Figure 2 (because this is our second year to ask executives about risks a decade ahead, there are corresponding prior year results only from our 2021 survey – these results reflect perceptions of risk issues for 2030).

Top 10 risks for 2031

FIGURE 2

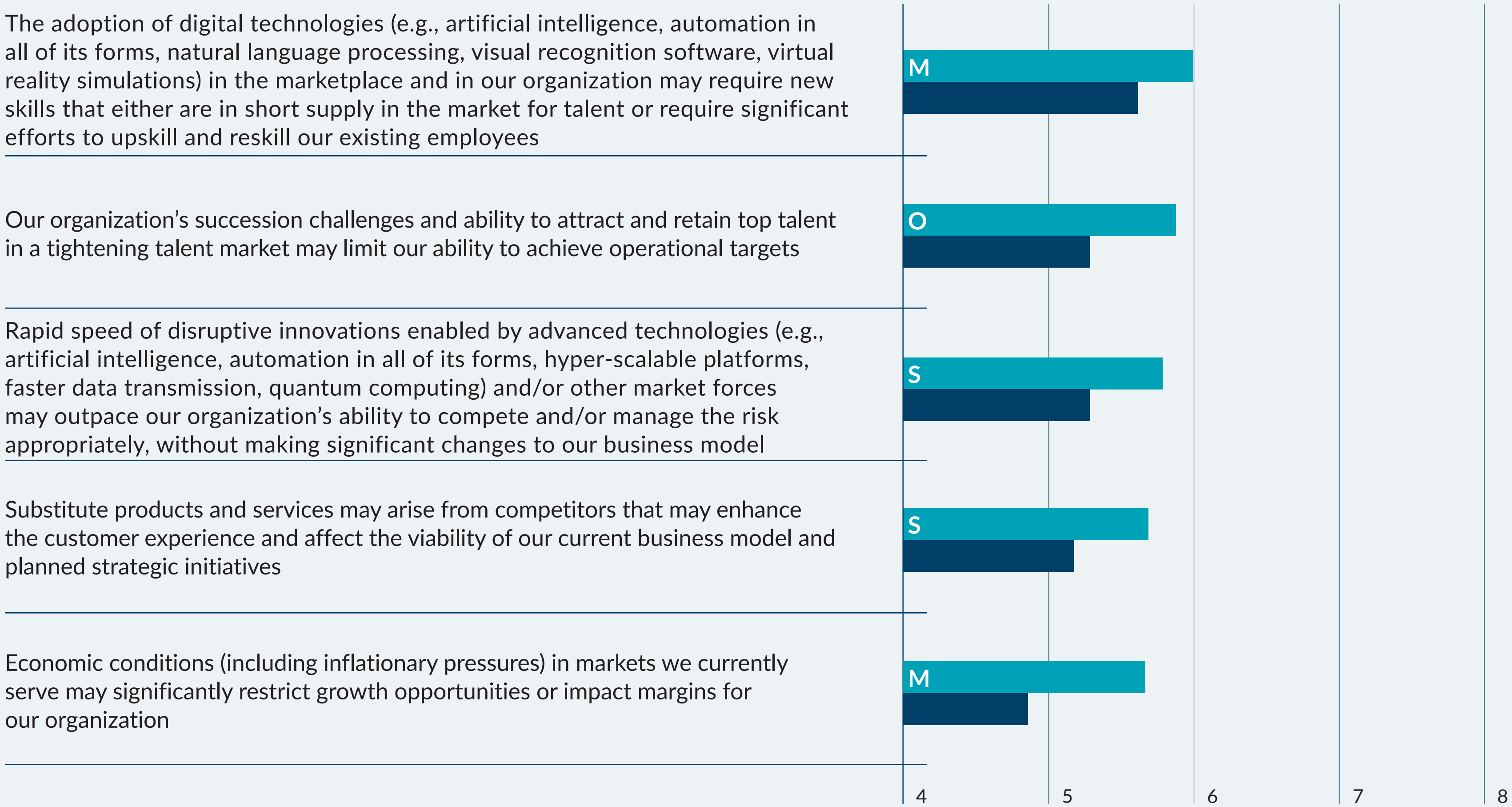
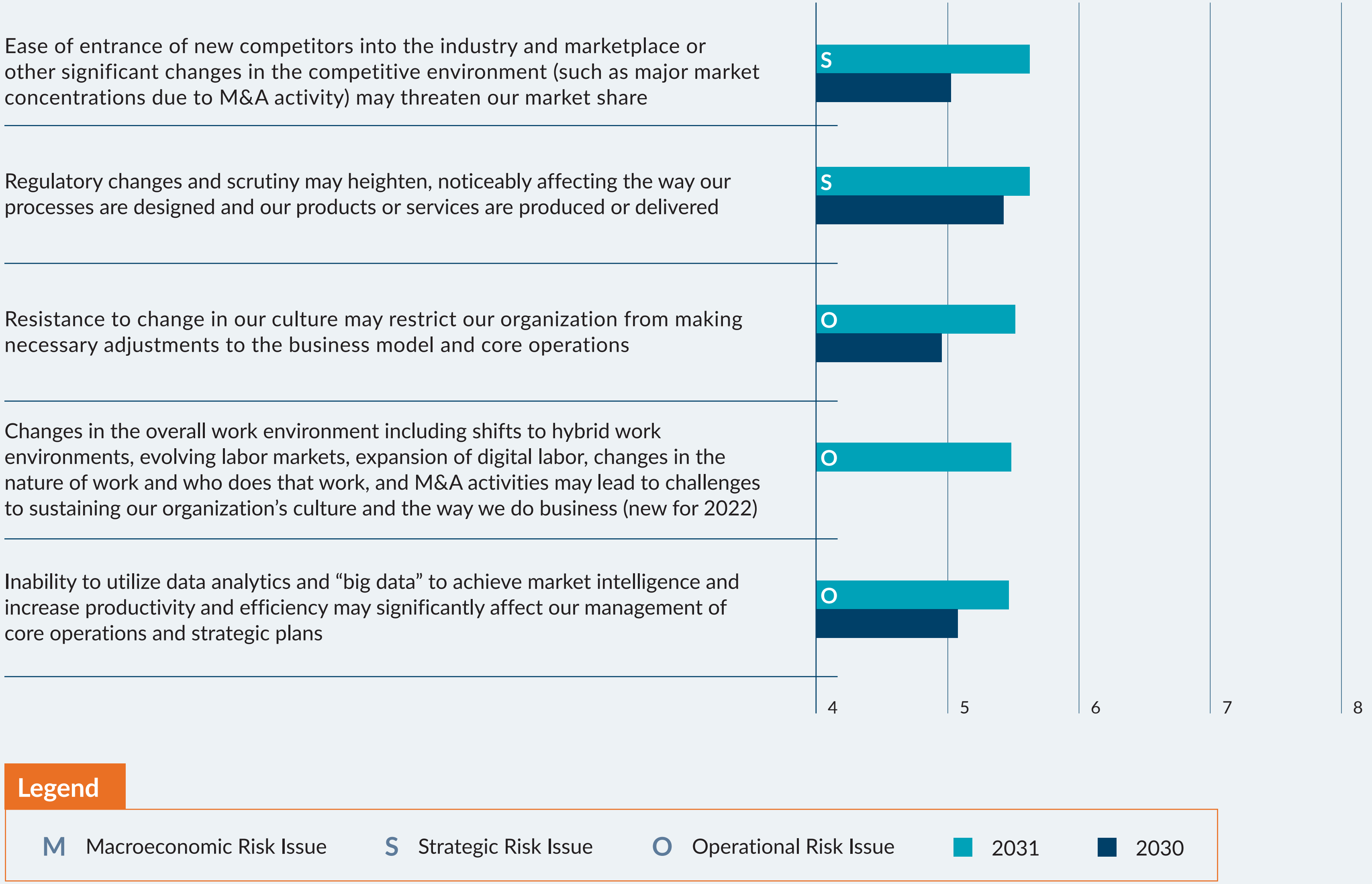


FIGURE 2 (CONTINUED)



Note: We did not rank risks a decade out in our study conducted two years ago.

In Table 1, we provide a summary of the impact assessments for each of the 36 risks for both 2022 and 2031. These are presented in descending order of relative impact for 2022 within each of the three dimensions of risk.

Perceived impact for 2022 and 2031 — by role

TABLE 1

MACROECONOMIC RISK ISSUES	YEAR	BOARD	CEO	CFO	CRO	CAE	CIO/ CTO	CSO	CDO	OTHER C-SUITE
Government policies surrounding public health practices, social distancing, return-to-work, crowd limits, and other pandemic-related regulations and protocols may significantly impact the performance of our business	2022	🟡	🔴	🟡	🟡	🟡	🔴	🔴	🔴	🟡
	2031	🟡	🟡	🟡	🟢	🟡	🟡	🟡	🟡	🟡
The adoption of digital technologies (e.g., artificial intelligence, automation in all of its forms, natural language processing, visual recognition software, virtual reality simulations) in the marketplace and in our organization may require new skills that either are in short supply in the market for talent or require significant efforts to upskill and reskill our existing employees	2022	🟡	🔴	🟡	🟡	🟡	🔴	🟡	🟡	🟡
	2031	🟡	🔴	🟡	🔴	🔴	🟡	🟡	🟡	🔴
Anticipated increases in labor costs may affect our opportunity to meet profitability targets	2022	🟡	🔴	🟡	🟡	🟡	🔴	🟡	🟡	🟡
	2031	🟡	🔴	🟡	🟡	🟡	🟡	🟡	🟢	🟡
Economic conditions (including inflationary pressures) in markets we currently serve may significantly restrict growth opportunities or impact margins for our organization	2022	🟡	🔴	🟡	🟡	🟡	🟡	🟡	🟡	🟡
	2031	🟡	🔴	🟡	🟡	🟡	🟡	🟡	🟡	🔴
Shifts in perspectives and expectations about social issues and priorities surrounding diversity, equity and inclusion are occurring faster than the pace at which our organization is motivated and able to manage effectively (e.g., recruiting, retention, career advancement, reward systems, behavioral incentives, shared values and culture), which may significantly impact our ability to attract/retain talent and compete in the marketplace	2022	🟡	🟡	🟡	🟡	🟡	🔴	🟡	🟡	🟡
	2031	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟡

TABLE 1 (CONTINUED)

MACROECONOMIC RISK ISSUES (CONTINUED)	YEAR	BOARD	CEO	CFO	CRO	CAE	CIO/ CTO	CSO	CDO	OTHER C-SUITE
Our ability to access sufficient capital/liquidity may restrict growth opportunities for our organization	2022	Yellow	Red	Yellow	Teal	Teal	Yellow	Yellow	Yellow	Teal
	2031	Yellow	Red	Yellow	Yellow	Teal	Yellow	Yellow	Yellow	Yellow
Anticipated volatility in global financial markets and currency exchange rates may create significantly challenging issues for our organization to address	2022	Yellow	Yellow	Yellow	Yellow	Teal	Yellow	Yellow	Yellow	Yellow
	2031	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
The current interest rate environment may have a significant effect on the organization's operations	2022	Yellow	Yellow	Yellow	Yellow	Teal	Yellow	Yellow	Yellow	Yellow
	2031	Yellow	Yellow	Yellow	Yellow	Teal	Yellow	Teal	Teal	Yellow
Political uncertainty surrounding the influence and continued tenure of key global leaders may impact national and international markets to the point of significantly limiting our growth opportunities	2022	Yellow	Yellow	Yellow	Teal	Teal	Yellow	Yellow	Yellow	Teal
	2031	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Geopolitical shifts, regional conflicts and instability in governmental regimes or expansion of global terrorism may restrict the achievement of our global growth and profitability objectives	2022	Yellow	Yellow	Yellow	Teal	Teal	Yellow	Yellow	Yellow	Teal
	2031	Yellow	Yellow	Yellow	Yellow	Teal	Yellow	Teal	Teal	Yellow
Evolving changes in global trade policies (e.g., post-Brexit implementations, escalating tariffs, border restrictions and shifts to multilateralism) may affect our ability to operate effectively and efficiently in international markets	2022	Teal	Yellow	Yellow	Teal	Teal	Yellow	Teal	Yellow	Teal
	2031	Yellow	Yellow	Teal	Teal	Teal	Yellow	Teal	Teal	Teal

TABLE 1 (CONTINUED)

STRATEGIC RISK ISSUES	YEAR	BOARD	CEO	CFO	CRO	CAE	CIO/ CTO	CSO	CDO	OTHER C-SUITE
Our organization may not be sufficiently resilient and/or agile to manage an unexpected crisis significantly impacting our reputation	2022	Yellow	Red	Yellow	Yellow	Yellow	Red	Red	Red	Yellow
	2031	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Our organization may not be able to adapt its business model to embrace the evolving "new normal" imposed on our business by the ongoing pandemic and emerging social change	2022	Yellow	Red	Yellow	Yellow	Green	Red	Yellow	Red	Green
	2031	Yellow	Yellow	Yellow	Green	Green	Yellow	Yellow	Yellow	Green
Rapid speed of disruptive innovations enabled by advanced technologies (e.g., artificial intelligence, automation in all of its forms, hyper-scalable platforms, faster data transmission, quantum computing) and/or other market forces may outpace our organization's ability to compete and/or manage the risk appropriately, without making significant changes to our business model	2022	Yellow	Red	Yellow	Yellow	Yellow	Red	Yellow	Yellow	Yellow
	2031	Yellow	Red	Yellow	Red	Yellow	Yellow	Yellow	Green	Red
Market conditions imposed by and in response to COVID-19 and emerging variants, including shifts in consumer behavior to digital channels, may continue to impact customer demand for our core products and services	2022	Yellow	Red	Yellow	Yellow	Yellow	Red	Yellow	Yellow	Yellow
	2031	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Yellow
Ease of entrance of new competitors into the industry and marketplace or other significant changes in the competitive environment (such as major market concentrations due to M&A activity) may threaten our market share	2022	Yellow	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
	2031	Yellow	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Opportunities for organic growth through customer acquisition and/or enhancement may be significantly limited for our organization	2022	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Yellow	Yellow	Yellow
	2031	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow

TABLE 1 (CONTINUED)

STRATEGIC RISK ISSUES (CONTINUED)	YEAR	BOARD	CEO	CFO	CRO	CAE	CIO/ CTO	CSO	CDO	OTHER C-SUITE
Regulatory changes and scrutiny may heighten, noticeably affecting the way our processes are designed and our products or services are produced or delivered	2022	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
	2031	Yellow	Yellow	Yellow	Red	Red	Yellow	Yellow	Teal	Red
Growing focus on climate change policies, regulations, and expanding disclosure requirements as well as expectations of key stakeholders about climate change, supply chain transparency, reward systems, and other governance and sustainability issues may require us to significantly alter our strategy and business model in ways that may be difficult for us to implement on a timely basis	2022	Yellow	Yellow	Yellow	Yellow	Teal	Yellow	Yellow	Yellow	Yellow
	2031	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Teal	Yellow
Substitute products and services may arise from competitors that may enhance the customer experience and affect the viability of our current business model and planned strategic initiatives	2022	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Teal
	2031	Yellow	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Sustaining customer loyalty and retention may be increasingly difficult due to evolving customer preferences and/or demographic shifts in our existing customer base	2022	Yellow	Yellow	Yellow	Yellow	Teal	Yellow	Yellow	Yellow	Yellow
	2031	Yellow	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Growth opportunities through acquisitions, joint ventures and other partnership activities may be difficult to identify and implement	2022	Yellow	Yellow	Yellow	Yellow	Teal	Yellow	Yellow	Yellow	Teal
	2031	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Teal	Yellow	Yellow
Rapidly expanding social media developments in the marketplace and rapidly developing platform technology innovations may significantly impact how we do business, interact with our customers, ensure regulatory compliance and/or manage our brand	2022	Yellow	Yellow	Yellow	Yellow	Teal	Yellow	Teal	Teal	Yellow
	2031	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Teal	Yellow	Yellow

STRATEGIC RISK ISSUES (CONTINUED)	YEAR	BOARD	CEO	CFO	CRO	CAE	CIO/ CTO	CSO	CDO	OTHER C-SUITE
Performance shortfalls may trigger activist shareholders who seek significant changes to our organization's strategic plan and vision	2022	🟢	🟡	🟡	🟢	🟢	🟡	🟡	🟡	🟢
	2031	🟡	🟡	🟡	🟡	🟢	🟡	🟡	🟢	🟡

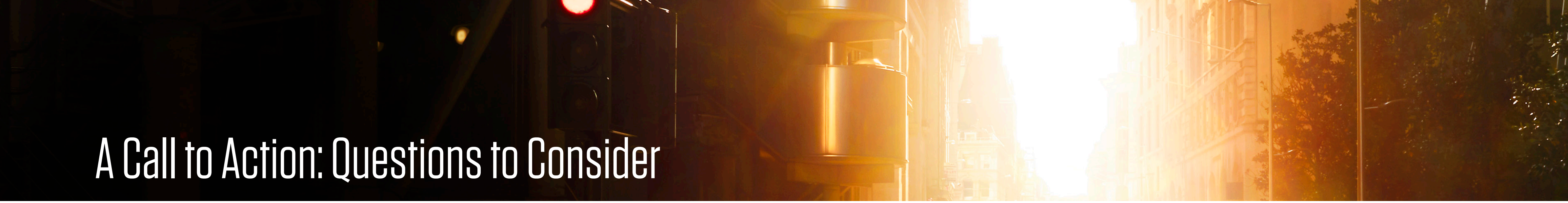
OPERATIONAL RISK ISSUES	YEAR	BOARD	CEO	CFO	CRO	CAE	CIO/ CTO	CSO	CDO	OTHER C-SUITE
Our organization's succession challenges and ability to attract and retain top talent in a tightening talent market may limit our ability to achieve operational targets	2022	🟡	🔴	🟡	🔴	🔴	🔴	🟡	🟡	🟡
	2031	🟡	🔴	🟡	🔴	🔴	🟡	🟡	🟡	🔴
Ongoing demands on or expectations of a significant portion of our workforce to "work remotely" or increased expectations for a transformed, collaborative hybrid work environment may negatively impact the effectiveness and efficiency of how we operate our business	2022	🟡	🔴	🔴	🟡	🟡	🔴	🔴	🟡	🟢
	2031	🟡	🟡	🟡	🟢	🟢	🟡	🟡	🟡	🟢
Our organization's culture may not sufficiently encourage the timely identification and escalation of risk issues and market opportunities that have the potential to significantly affect our core operations and achievement of strategic objectives	2022	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🔴	🟡
	2031	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟡
Our ability to meet expectations around protecting the health and safety of employees, customers, suppliers and the communities in which we operate may be insufficient to receive market permission to operate or encourage people to work for us or do business with us	2022	🟡	🟡	🟡	🟢	🟢	🟡	🟡	🔴	🟢
	2031	🟡	🟡	🟡	🟢	🟢	🟡	🟡	🟡	🟢

TABLE 1 (CONTINUED)

OPERATIONAL RISK ISSUES (CONTINUED)	YEAR	BOARD	CEO	CFO	CRO	CAE	CIO/ CTO	CSO	CDO	OTHER C-SUITE
Changes in the overall work environment including shifts to hybrid work environments, evolving labor markets, expansion of digital labor, changes in the nature of work and who does that work, and M&A activities may lead to challenges to sustaining our organization's culture and the way we do business (new for 2022)	2022	🟡	🟡	🟡	🟡	🟡	🔴	🟡	🟡	🟡
	2031	🟡	🔴	🟡	🟡	🟡	🟡	🟡	🟡	🟡
Uncertainty surrounding our organization's core supply chain including the viability of key suppliers, scarcity of supplies, volatile shipping and delivery options, or stable prices in the supply chain ecosystem may make it difficult to deliver our products or services at acceptable margins	2022	🟡	🔴	🟡	🟡	🟡	🟡	🟡	🟡	🟡
	2031	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟡
Our existing operations, legacy IT infrastructure, lack of digital expertise in the workforce and insufficient digital savviness in the C-suite and boardroom may result in failure to meet performance expectations related to quality, time to market, cost and innovation as well as our competitors, especially those that are either "born digital" or investing heavily to leverage technology for competitive advantage	2022	🟡	🟡	🟡	🟡	🟡	🔴	🟡	🟡	🟡
	2031	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟡
Inability to utilize data analytics and "big data" to achieve market intelligence and increase productivity and efficiency may significantly affect our management of core operations and strategic plans	2022	🟡	🟡	🟡	🟡	🟡	🔴	🟡	🟡	🟡
	2031	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟡
Resistance to change in our culture may restrict our organization from making necessary adjustments to the business model and core operations	2022	🟡	🟡	🟡	🟡	🟡	🔴	🟡	🟡	🟡
	2031	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟡

TABLE 1 (CONTINUED)

OPERATIONAL RISK ISSUES (CONTINUED)	YEAR	BOARD	CEO	CFO	CRO	CAE	CIO/ CTO	CSO	CDO	OTHER C-SUITE
Third-party risks arising from our reliance on outsourcing and strategic sourcing arrangements, IT vendor contracts, and other partnerships/ joint ventures to achieve operational goals may prevent us from meeting organizational targets or impact our brand image	2022	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟡
	2031	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟡
Our organization may not be sufficiently prepared to manage cyber threats such as ransomware and other attacks that have the potential to significantly disrupt core operations and/or damage our brand	2022	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟡
	2031	🟡	🟡	🟡	🟡	🔴	🟡	🟢	🟢	🟡
Ensuring data privacy and compliance with growing identity protection expectations and regulations may require alterations demanding significant resources to restructure how we collect, store, share and use data to run our business	2022	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟡
	2031	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟡



A Call to Action: Questions to Consider

This report provides insights from 1,453 board members and executives about risks that are likely to affect their organizations in the short term (over the next 12 months) and over the next decade (2031). Our respondents reveal that the scope of global risks has become more expansive and the number of different risks rated as top risk concerns is only growing in nature and type. While some risks critical in the prior year remain top of mind for 2022, there are noticeable shifts in what comprise the top 10 list of risks for 2022 and how they differ from those anticipated in the next decade, reminding executives that risks are constantly emerging and evolving.

The ongoing events continue to present major challenges as we move into 2022. The level of uncertainty in today's marketplace is rapidly evolving and presenting new risks that many previously thought were unimaginable. The ever-changing risk landscape and the overall perceived magnitude and severity of risks should prompt boards and senior executives to closely scrutinize the approaches they use to keep an eye on risks emerging around the corner.

Unfortunately, some organizations continue to manage risks the way they have for many years, even though the profile of risks is evolving as business transforms in light of the pandemic and rapidly advancing digital economy, as well as, for many organizations, the transition to permanent hybrid work environments. Their risk profile is most certainly not yesterday's risks, and a focus on financial and compliance risks using static analog age tools without any conception of the organization's risk appetite leaves decision-makers across the organization to their own devices. Soon those organizations may realize, once it's too late, that their level of investment in risk management and willingness to engage in robust tools are inadequate.

Boards of directors and executive management teams cannot afford to manage risks casually on a reactive basis. Hopefully the experiences of navigating the complexities of the ongoing pandemic, social unrest and the extreme polarization of viewpoints revealed by the events triggered by a formidable airborne pandemic that levied a once-in-a-century blow on the global economy have highlighted for executives and boards weak points in their organizations' approach to risk management and preparedness for the unexpected. Immature, ad hoc approaches to risk management will soon be outpaced by the rapid pace of disruptive innovation and technological developments in an ever-advancing digital world. The focus today is on agility and resilience as much as it is on prevention and detection.

Given the disruptive environment, now may be an opportune time for boards and C-suites to closely examine how their organization approaches risk management and oversight in the digital age to pinpoint aspects demanding significant improvement. Managing today's risks using outdated techniques and tools may leave the organization exposed to significant, undesirable and potentially disruptive risk events that could obviate its strategy and business model and threaten its brand and reputation — even its very survival.

Accordingly, in the interest of evaluating and improving risk management capabilities in light of the findings in this report, we offer executives and directors the following diagnostic questions to consider when evaluating their organization's risk assessment and risk management processes:

Carry forward risk management lessons learned from the pandemic

Because many organizations have benefited from the "all-hands-on-deck" approach to how their leadership teams have come together to quickly assess emerging situations and respond to them as never seen before, many are pausing to find ways to carry forward the positive lessons from the past 18 months:

- How has the level of open dialogue among executives about risks improved over the recent past and what can we do to preserve that level of transparency and focus going forward?
- The pandemic forced organizations to address risks it imposed on them and their longstanding approaches for delivering core products and services. That reality forced the integration of risk insights with the strategies of the business. What have we learned from our management of risks triggered by the pandemic about the importance of focusing attention on risks that are most critical to our core business operations and strategic initiatives? What changes have we made to our business model that should be preserved for the long term?
- Who are the key business leaders and groups (committees, councils, task forces) across the organization that were involved in helping navigate the unfolding risks our organization faced during the pandemic? To what extent do those groups need to be formalized so that they continue to provide risk management leadership and inform decision-making for the future?

Ensure our risk management approach is sufficiently robust

Because risks are constantly changing, the risk management process needs to be repeatable, clearly defined and adequately resourced to ensure business leaders receive the information they need to stay abreast of emerging issues:

- What insights have the ongoing pandemic and other related risk issues revealed about limitations in our organization's approach to risk management?
  - To what extent was the risk of a pandemic on our risk radar prior to early 2020? How did that help us prepare for what we have faced?
  - How prepared was our organization to deal with the challenges we have experienced?
  - How effective was our organization's business continuity plan in addressing the enterprisewide impact of COVID-19? If there were holes in the plan, have we addressed them?
  - Did our employees have all the technology and tools they needed? Did urgent efforts to adopt new tools and technologies and transition to a virtual workplace achieve acceptable productivity and returns?
  - Did our transition to a work-from-anyplace virtual environment create information security issues? If so, have we addressed those issues?
  - Was our culture resilient enough to pivot in response to the pandemic's effects on our customers, employees, third-party relationships and supply chain?
  - What do we now understand that we wish we had known prior to the pandemic? Why didn't we better anticipate those issues?
- Is the process supported by an effective, robust methodology that is definable, repeatable and understood by key stakeholders?
  - How well does our approach to risk identification foster consideration of risks that may have a higher-level strategic impact and that may be triggered by external events or competitor actions that are beyond our organization's control?
  - Does the process delineate the critical enterprise risks from the day-to-day risks of managing the business so as to focus the dialogue in the C-suite and boardroom on the risks that matter most?
  - Do we engage all the right stakeholders in the risk identification process? Would most stakeholders describe our approach to risk management as one that is stale and requiring a refresh? Would they consider it to be siloed across disparate functions in the organization? Is our approach primarily focused on internal, operational types of risks using a bottom-up approach to risk identification? Is it more ad hoc than structured?
  - How extensively do we evaluate the effectiveness of responses that are intended to help prevent risk events from occurring and that might reduce the impact of risk events should they occur?
- Is there a process for identifying emerging risks? Does the risk identification process allow the board and management enough time to adequately consider response plans to these risks?

- To what extent does our management dashboard system include robust key risk indicators that help the leadership team monitor shifts in relevant external trends? Does the dashboard cover the most critical enterprise risks? Does it provide an effective early warning capability that enables the organization to act as an early mover in response to market opportunities and emerging risks?

Evaluate whether our risk focus is positioned to provide strategic value

Given the pace of change experienced in the industry and the relative riskiness and nature of the organization's operations:

- To what extent are we centering our focus on risks in the context of our organization's execution of the strategy, achieving its business objectives, sustaining its operations, and preserving its brand image and reputation?
- To what extent is our leadership's knowledge of top risks enhanced by the organization's risk management process serving as a value-added input to the strategy-setting process?
- Does our risk management process consider a sufficient time horizon to pick up looming strategic and emerging risks ("gray rhinos"), e.g., the longer the horizon, the more likely new risk issues will present themselves?
- To what extent is our focus on external risks linked to geopolitical shifts, emerging disruptive innovations and changes in macroeconomic factors?
- In our ongoing assessment of risk, do we consider the effects of changes in internal operations, personnel, processes, technologies, suppliers and third-party vendors?
- Does our risk management process consider extreme as well as plausible scenarios? Do we have meaningful discussions of potential "black swan" and "gray rhino" events? Do we deploy scenario analysis techniques to understand better how different scenarios will play out and their implications to our strategy and business model? Are response plans updated for the insights gained from this process?
- Are we encouraging the identification of opportunities to take on more risk on a managed basis? For example, is risk management integrated with strategy-setting to help leaders make the best bets from a risk/reward standpoint that have the greatest potential for creating enterprise value?
- Do the board and senior management receive risk-informed insights, competitive intelligence and opportunities to secure early-mover positioning in the marketplace, fostering more effective dialogue in decision-making processes and improved anticipation of future exposures and vulnerabilities?

Clarify accountabilities for managing risks

Following completion of a formal or informal risk assessment:

- Are risk owners assigned for newly identified risks? To what extent are owners held accountable for managing their assigned risks?
- Are effective risk response action plans developed to address the risk at the source? Are risk owners accountable for the design and execution of those responses?
- To what extent does the organization need to elevate its oversight and governance of its business continuity planning and operational resilience activities? To what extent are these efforts limited to certain aspects of the organization (e.g., information technology, supply chain operations) and not enterprisewide?
- Is there an effort to source the root causes of certain risks that warrant a better understanding? Does the sourcing process look for patterns that connect potential interrelated risk events?
- Are we monitoring the business environment over time for evidence of changes that may invalidate one or more critical assumptions underlying the organization's strategy? If so, when there is evidence that one or more critical assumptions underlying the strategy are becoming, or have become, invalid, does management act in a timely fashion on that knowledge to revisit the strategy and undertake necessary mid-course adjustments?

- Do decision-making processes consider the impact of a particular decision on the organization's risk profile?
  - Have we sufficiently communicated the relative value and importance of considering risk in decision-making across the enterprise?
  - Is the board sufficiently involved in the decision-making process, particularly when it involves acquisition of new businesses, entry into new markets, the introduction of innovative technologies or alteration of key assumptions underlying the strategy?
  - Is there actionable, current risk information that is widely shared to enable more informed decision-making across the organization?
- Are significant risks related to the execution of the strategy and business model monitored over time to consider whether changes have occurred requiring corrective action and whether the organization continues to operate within established risk tolerances in meeting key business objectives?

Communicate an enterprise view of top risks and board risk oversight

With respect to communicating and overseeing the risk profile:

- Is the board informed of the results of management's risk assessment on a timely basis? Do directors agree with management's determination of the significant risks?
- Are significant risk issues warranting attention by executive management and the board escalated to their attention on a timely basis? Does management apprise the board in a timely manner of significant emerging risks or significant changes in the organization's risk profile?
- With respect to the most critical risks facing the organization, do directors understand at a high level the organization's responses to these risks? Is there an enterprisewide process in place that directors can point to that answers these questions, and is that process informing the board's risk oversight effectively?
- Is there a periodic board-level dialogue regarding management's appetite for risk and whether the organization's risk profile is consistent with that risk appetite? Is the board satisfied that the strategy-setting process appropriately considers a substantive assessment of the risks the enterprise is taking on as strategic alternatives are considered and the selected strategy is implemented?
- Given the organization's risk profile, does the board periodically consider whether it has access to the diverse expertise and experience needed — either on the board itself or through access to external advisers — to provide the necessary oversight and advice to management? For example, are there digital savvy and experienced directors on the board?

Assess impact of leadership and culture on our risk management process

Because culture and leadership significantly impact the organization's approach to risk oversight:

- Is the board's and the C-suite's support for more robust risk management processes evident to key stakeholders across the organization?
  - To what extent is our risk management process helping to foster robust discussion and dialogue about top risk issues among senior management and the board?
  - Is the board asking for more risk management information and focused on advancing the organization's risk management capabilities?
- To what extent is there a willingness among the leadership team to be more transparent about existing risk issues when sharing information with one another? What positive aspects of the organization's culture have contributed to this improvement? What aspects continue to limit openness and transparency about risks?
- Do we have an accurate read on how our organization's culture is affecting how employees engage in risk management processes and conversations? If so, how do we know?
- Are warning signs communicated by the risk management, compliance and ethics, or internal audit functions addressed in a timely fashion by executive and operational management?

- Do we have a “speak up” culture that encourages transparency and sharing of contrarian information and bad news? Are our employees convinced they can “speak up” without fear of repercussions to their careers or compensation? For example, does the process:
  - Encourage an open, positive dialogue for identifying and evaluating opportunities and risks?
  - Focus on reducing the risk of undue bias and groupthink?
  - Give adequate attention to differences in viewpoints that may exist across different executives and global jurisdictions?
- Is adequate attention given to red flags indicating warning signs of a dysfunctional culture that suppresses escalation of important risk information or encourages unacceptable risk taking?

These and other questions can assist organizations in defining their specific risks and assessing the adequacy of the processes informing their risk management and board risk oversight. We hope the important insights about the perceived risks on the horizon for 2022 and a decade later (2031) provided in this executive summary prove useful. We also hope that the insights serve as a catalyst for an updated assessment of risks and the risk management capabilities in place within all organizations, as well as improvement in their risk assessment processes and risk management capabilities.

> “For enterprise risk management to add value, it must offer actionable insights that enhance an organization’s preparedness, agility and decisiveness. Appropriately focused on critical enterprise risks and emerging risks, it can help leaders not only understand the disruptive risks that could have an existential impact on the organization but also consider those risks in setting strategy and evaluating options in specific situations.”
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> **EMMA MARCANDALLI**
> Managing Director, Protiviti

Methodology

We are pleased with the global reach of our survey this year, with strong participation from 1,453 board members and executives across a variety of industries. Our survey captures insights from C-suite executives and directors, 43% of whom represent companies based in North America, 20% in Europe, 20% in Asia and Australia/New Zealand, and the remaining 17% from Latin America, India, Africa and the Middle East.

Our survey was conducted online in September and October of 2021 to capture perspectives on 36 risks on the minds of executives as they peered into 2022. Each respondent was asked to rate 36 individual risk issues in terms of their relative impact using a 10-point scale, where a score of 1 reflects "No Impact at All" and a score of 10 reflects "Extensive Impact" to their organization over the next year. We also asked them to consider how each of these risks was likely to affect their organizations 10 years in the future (i.e., in 2031).

For each of the 36 risk issues, we computed the average score reported by all respondents. Using mean scores across respondents, we rank-ordered risks from highest to lowest impact. This approach enabled us to compare mean scores across the past three years to highlight changes in the perceived level of risk.

Consistent with our prior studies, we grouped all the risks based on their average scores into one of three classifications:

- Risks with an average score of **6.0 or higher** are classified as having a **"Significant Impact"** over the next 12 months (2022)/over the next decade (2031).
- Risks with an average score of **4.5 through 5.99** are classified as having a **"Potential Impact"** over the next 12 months (2022)/over the next decade (2031).
- Risks with an average score of **4.49 or lower** are classified as having a **"Less Significant Impact"** over the next 12 months (2022)/over the next decade (2031).

We refer to these risk classifications throughout our report, and we also review results for various subgroups (i.e., company size, position held by respondent, industry representation, geographic location, and organization type). With respect to the various industries, we grouped related industries into combined industry groupings to facilitate analysis, consistent with our prior years' reports.

Table 2 lists the 36 risk issues rated by our respondents, arrayed across three categories — Macroeconomic, Strategic and Operational.

List of 36 risk issues analyzed

TABLE 2

MACROECONOMIC RISK ISSUES
• Anticipated volatility in global financial markets and currency exchange rates may create significantly challenging issues for our organization to address
• Political uncertainty surrounding the influence and continued tenure of key global leaders may impact national and international markets to the point of significantly limiting our growth opportunities
• Evolving changes in global trade policies (e.g., post-Brexit implementations, escalating tariffs, border restrictions and shifts to multilateralism) may affect our ability to operate effectively and efficiently in international markets
• Our ability to access sufficient capital/liquidity may restrict growth opportunities for our organization
• Economic conditions (including inflationary pressures) in markets we currently serve may significantly restrict growth opportunities or impact margins for our organization
• The adoption of digital technologies (e.g., artificial intelligence, automation in all of its forms, natural language processing, visual recognition software, virtual reality simulations) in the marketplace and in our organization may require new skills that either are in short supply in the market for talent or require significant efforts to upskill and reskill our existing employees
• Geopolitical shifts, regional conflicts and instability in governmental regimes or expansion of global terrorism may restrict the achievement of our global growth and profitability objectives
• Anticipated increases in labor costs may affect our opportunity to meet profitability targets
• The current interest rate environment may have a significant effect on the organization's operations
• Government policies surrounding public health practices, social distancing, return-to-work, crowd limits, and other pandemic-related regulations and protocols may significantly impact the performance of our business[4]
• Shifts in perspectives and expectations about social issues and priorities surrounding diversity, equity and inclusion are occurring faster than the pace at which our organization is motivated and able to manage effectively (e.g., recruiting, retention, career advancement, reward systems, behavioral incentives, shared values and culture), which may significantly impact our ability to attract/retain talent and compete in the marketplace[4]

[4] These risks were new to the 2021 survey.

List of 36 risk issues analyzed

TABLE 2 (CONTINUED)

STRATEGIC RISK ISSUES
• Rapid speed of disruptive innovations enabled by advanced technologies (e.g., artificial intelligence, automation in all of its forms, hyper-scalable platforms, faster data transmission, quantum computing) and/or other market forces may outpace our organization's ability to compete and/or manage the risk appropriately, without making significant changes to our business model
• Rapidly expanding social media developments in the marketplace and rapidly developing platform technology innovations may significantly impact how we do business, interact with our customers, ensure regulatory compliance and/or manage our brand
• Regulatory changes and scrutiny may heighten, noticeably affecting the way our processes are designed and our products or services are produced or delivered
• Growing focus on climate change policies, regulations, and expanding disclosure requirements as well as expectations of key stakeholders about climate change, supply chain transparency, reward systems, and other governance and sustainability issues may require us to significantly alter our strategy and business model in ways that may be difficult for us to implement on a timely basis
• Ease of entrance of new competitors into the industry and marketplace or other significant changes in the competitive environment (such as major market concentrations due to M&A activity) may threaten our market share
• Our organization may not be sufficiently resilient and/or agile to manage an unexpected crisis significantly impacting our reputation
• Growth opportunities through acquisitions, joint ventures and other partnership activities may be difficult to identify and implement
• Opportunities for organic growth through customer acquisition and/or enhancement may be significantly limited for our organization
• Substitute products and services may arise from competitors that may enhance the customer experience and affect the viability of our current business model and planned strategic initiatives
• Sustaining customer loyalty and retention may be increasingly difficult due to evolving customer preferences and/or demographic shifts in our existing customer base
• Performance shortfalls may trigger activist shareholders who seek significant changes to our organization's strategic plan and vision
• Market conditions imposed by and in response to COVID-19 and emerging variants, including shifts in consumer behavior to digital channels, may continue to impact customer demand for our core products and services[4]
• Our organization may not be able to adapt its business model to embrace the evolving "new normal" imposed on our business by the ongoing pandemic and emerging social change[5]

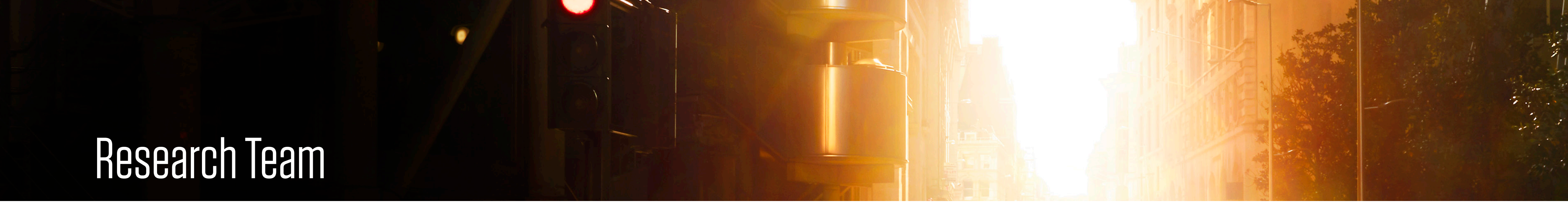
[4] These risks were new to the 2021 survey.

TABLE 2 (CONTINUED)

OPERATIONAL RISK ISSUES
• Changes in the overall work environment including shifts to hybrid work environments, evolving labor markets, expansion of digital labor, changes in the nature of work and who does that work, and M&A activities may lead to challenges to sustaining our organization's culture and the way we do business[5]
• Uncertainty surrounding our organization's core supply chain including the viability of key suppliers, scarcity of supplies, volatile shipping and delivery options, or stable prices in the supply chain ecosystem may make it difficult to deliver our products or services at acceptable margins
• Third-party risks arising from our reliance on outsourcing and strategic sourcing arrangements, IT vendor contracts, and other partnerships/joint ventures to achieve operational goals may prevent us from meeting organizational targets or impact our brand image
• Our organization's succession challenges and ability to attract and retain top talent in a tightening talent market may limit our ability to achieve operational targets
• Our organization may not be sufficiently prepared to manage cyber threats such as ransomware and other attacks that have the potential to significantly disrupt core operations and/or damage our brand
• Ensuring data privacy and compliance with growing identity protection expectations and regulations may require alterations demanding significant resources to restructure how we collect, store, share and use data to run our business
• Our existing operations, legacy IT infrastructure, lack of digital expertise in the workforce and insufficient digital savviness in the C-suite and boardroom may result in failure to meet performance expectations related to quality, time to market, cost and innovation as well as our competitors, especially those that are either "born digital" or investing heavily to leverage technology for competitive advantage
• Inability to utilize data analytics and "big data" to achieve market intelligence and increase productivity and efficiency may significantly affect our management of core operations and strategic plans
• Resistance to change in our culture may restrict our organization from making necessary adjustments to the business model and core operations
• Our organization's culture may not sufficiently encourage the timely identification and escalation of risk issues and market opportunities that have the potential to significantly affect our core operations and achievement of strategic objectives
• Our ability to meet expectations around protecting the health and safety of employees, customers, suppliers and the communities in which we operate may be insufficient to receive market permission to operate or encourage people to work for us or do business with us[4]
• Ongoing demands on or expectations of a significant portion of our workforce to "work remotely" or increased expectations for a transformed, collaborative hybrid work environment may negatively impact the effectiveness and efficiency of how we operate our business[4]

[4] These risks were new to the 2021 survey.

[5] This risk is new to the 2022 survey.



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About Protiviti

Protiviti (www.protiviti.com) is a global consulting firm that delivers deep expertise, objective insights, a tailored approach and unparalleled collaboration to help leaders confidently face the future. Protiviti and our independent and locally owned Member Firms provide clients with consulting and managed solutions in finance, technology, operations, data, analytics, governance, risk and internal audit through our network of more than 85 offices in over 25 countries.

Named to the 2021 Fortune 100 Best Companies to Work For® list, Protiviti has served more than 60 percent of *Fortune* 1000 and 35 percent of *Fortune* Global 500 companies. The firm also works with smaller, growing companies, including those looking to go public, as well as with government agencies. Protiviti is a wholly owned subsidiary of Robert Half (NYSE: RHI). Founded in 1948, Robert Half is a member of the S&P 500 index.

About NC State University's ERM Initiative

The Enterprise Risk Management (ERM) Initiative in the Poole College of Management at NC State University provides thought leadership about ERM practices and their integration with strategy and corporate governance. Faculty in the ERM Initiative frequently work with boards of directors and senior management teams helping them link ERM to strategy and governance, host executive workshops and educational training sessions, and issue research and thought papers on practical approaches to implementing more effective risk oversight techniques (www.erm.ncsu.edu).

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