EXECUTIVE PERSPECTIVES ON TOP RISKS 2020

Key issues being discussed
in the boardroom and C-suite

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

NC STATE Poole College of Management
Enterprise Risk Management Initiative

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Introduction

A constantly evolving geopolitical landscape that is trending toward nationalism, an ever-present concern over cyber threats, increasing market disruptions caused by "born digital" organizations and the rise of artificial intelligence (AI)-enabled technologies, and the effects of tightening labor markets are just a handful of concerns voiced by organizational leaders around the globe. Add to these the devastating impact of hurricanes and other natural disasters, continued apprehension over interest rates, uncertainty in war-torn regions of the world, polarization of political viewpoints, the ease with which information can go viral via social media and other digital platforms, and ongoing negotiations to settle Brexit. These are but a few of the many drivers of uncertainty affecting the 2020 global business outlook.

Concerns that foretell a rapidly changing business environment and the potential for unwelcome surprises vividly illustrate the reality that organizations of all types face risks that can either disrupt their business model over time or damage brand image and reputation almost overnight. Insufficient focus on and attention to the web of complex enterprisewide risk events of varying velocity, persistence and severity are likely to threaten an entity's brand, reputation, business model and, in some instances, its very survival.

Leaders of organizations in virtually every industry, size of organization and geographic location are reminded all too frequently that they operate in what appears to many to be an increasingly risky global landscape. 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 an ever-advancing digital world.

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 eighth 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.

Our respondent group, comprised primarily of board members and C-suite executives from all major regions of the world, provided their perspectives about the potential impact in 2020 of 30 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

[1] One new risk was included in the 2020 survey. It replaced a risk we asked about in prior years that consistently was of relatively minimal concern over the years surveyed. See Table 1 for a list of the 30 risks addressed in this study.

In presenting the results of our research, we begin with a brief description of our methodology and an executive summary of the results. Following this introduction, we discuss the overall risk concerns for 2020, including how they have changed from 2019 and 2018, followed by a review of results by size of organization and type of executive position, as well as a breakdown by industry, geographic location, type of ownership structure (i.e., public company, privately held, not-for-profit and government), and companies with rated debt outstanding. We conclude with a discussion of plans among organizations to improve their capabilities for managing risk and a call to action offering executives and directors diagnostic questions to consider when evaluating risk assessment and risk management processes.

> "Our survey results suggest that business leaders are concerned with two overarching themes as they look forward to 2020 – talent and culture on the one hand, technology and innovation on the other. These two interrelated themes are especially relevant in the coming year as companies across the globe strive to strengthen their competitive position by advancing their digital maturity and embracing the transformative potential of technology."
>
> Pat Scott, Executive Vice President, Global Industry Program, Protiviti

TABLE OF CONTENTS

Methodology

We are pleased that participation from executives was very strong this year. Globally, 1,063 board members and executives across a variety of industries participated in this survey. This represents a 29% increase in participation over last year's 825 responses (and 46% more than in our 2018 report). Our survey captures insights from C-suite executives and directors, 39% of whom represent companies based in North America, 22% in Europe, 18% in Asia and Australia/New Zealand, and the remaining 21% from Latin America, India, Africa and the Middle East.

Our survey was conducted online in the fall of 2019. Each respondent was asked to rate 30 individual risk issues 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.

For each of the 30 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.
- Risks with an average score of **4.5 through 5.99** are classified as having a **"Potential Impact"** over the next 12 months.
- Risks with an average score of 4.49 or lower are classified as having a **"Less Significant Impact"** over the next 12 months.

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, organization type, and presence of rated debt). With respect to the various industries, we grouped related industries into combined industry groupings to facilitate analysis, consistent with our prior years' reports.

Table 1 on the next page lists the 30 risk issues rated by our respondents, arrayed across three categories — Macroeconomic, Strategic and Operational.

List of 30 Risk Issues Analyzed

TABLE 1

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., Brexit, NAFTA update, escalating tariffs) may limit 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 in markets we currently serve may significantly restrict growth opportunities for our organization
- The adoption of digital technologies (e.g., artificial intelligence, robotics, natural language processing) in our organization may require new skills that either are in short supply or require significant efforts to upskill and reskill existing employees[2]
- Geopolitical shifts 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
- Unexpected change in the current interest rate environment may have a significant effect on the organization's operations

[2] Represents a new risk added to the 2020 survey.

TABLE 1 (CONTINUED)

STRATEGIC RISK ISSUES

- Rapid speed of disruptive innovations enabled by new and emerging technologies (e.g., artificial intelligence, robotics, machine learning, hyperscalable platforms) 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
- Social media, mobile applications and other Internet-based applications may significantly impact our brand, customer relationships, regulatory compliance processes and/or how we do business
- Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered
- Shifts in environmental, social and governance (ESG) preferences as well as expectations of key stakeholders about climate change, diversity and inclusion, and other sustainability issues may be difficult for us to identify and address 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 prepared to manage an unexpected crisis significantly impacting our reputation
- Growth 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 that 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

TABLE 1 (CONTINUED)

OPERATIONAL RISK ISSUES
• The behaviors and personal conduct of the organization's management team and other key representatives may not conform to societal and ethical expectations (new in 2019)
• Uncertainty surrounding the viability of key suppliers, scarcity of supply, or stable supply prices 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 that have the potential to significantly disrupt core operations and/or damage our brand
• Ensuring privacy/identity management and information security/system protection may require significant resources for us
• Our existing operations, legacy IT infrastructure, and insufficient embrace of digital thinking and capabilities may not meet performance expectations related to quality, time to market, cost and innovation as well as our competitors, especially new competitors that are "born digital" and with a low cost base for their operations, or established competitors with superior operations
• 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 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 that have the potential to significantly affect our core operations and achievement of strategic objectives

Executive Summary

AI, robotics and other rapidly developing digital technologies. Changes in the geopolitical landscape. Shifting customer preferences and demographics. Natural disasters. Record lows in unemployment, tightening labor markets and escalating competition for specialized talent. Immigration challenges. Cyber breaches on a massive scale. Terrorism. Big data analytics. A strong U.S. dollar.

These and a host of other significant risk drivers are all contributing to the risk dialogue happening today in boardrooms and executive suites. They highlight the influence of the economy and digital disruption on the risk landscape.

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 for 2020 from 1,063 respondents in C-suite and board positions in organizations around the globe.

The need for greater transparency about the nature and magnitude of risks undertaken in executing an organization's corporate strategy continues to be high as expectations of key stakeholders regarding risk management and risk oversight remain strong. Pressures from boards, volatile markets, intensifying competition, demanding and potentially disruptive regulatory requirements, changing workplace dynamics, shifting customer preferences, uncertainty regarding catastrophic events, and other dynamic forces are leading to increasing calls for management to design and implement effective risk management capabilities and response mechanisms to identify, assess and manage the organization's key risk exposures, with the intent of reducing them to an acceptable level.

TOP RISKS FOR 2020

1. Impact of regulatory change and scrutiny on operational resilience, products and services
2. Economic conditions impacting growth
3. Succession challenges; ability to attract and retain top talent
4. Ability to compete with "born digital" and other competitors
5. Resistance to change operations
6. Cyber threats
7. Privacy/identity management and information security
8. Organization's culture may not sufficiently encourage timely identification and escalation of risk issues
9. Sustaining customer loyalty and retention
10. Adoption of digital technologies may require new skills or significant efforts to upskill/reskill existing employees *(new in 2020)*

Major Findings

- **Global business environment slightly less risky in 2020 —** Survey respondents indicate that the overall global business context is somewhat less risky in 2020 relative to 2019, after we saw the level of overall risk in the environment increase in 2019 from 2018. Last year, survey respondents rated all of the top 10 risks higher for 2019 relative to 2018, but this year only two of the top 10 risks are rated higher for 2020 than they were in 2019. Only the smallest sized organizations (those with revenues less than $100 million) perceive the overall risk environment for 2020 to be higher than 2019. Despite this overall general shift toward a slightly lower risk concern for 2020, a majority of respondents still rate each of the top 10 risks as a "Significant Impact" risk, with seven of our top 10 risks having an overall average score exceeding 6.0 (on a 10-point scale), placing the profile of top risks as "Significant Impact" on an overall basis. It is important to note that while there is some slight reduction in risk concerns for 2020 relative to 2019, both 2020 and 2019 risk concerns remain much higher than two years ago. This indicates that while the level of risk is somewhat lower in 2020, there is still a higher level of risk concern as compared to 2018. For example, risk levels for eight of the top 10 risks in 2020 were higher than the ratings two years ago. This suggests that the elevated view of overall risk levels we observed in 2019 continues in 2020.
- **Interesting shifts in the 2020 top 10 risks —** We observe some interesting changes in the top 10 list of risks for 2020 relative to last year. One risk jumped from not appearing in the top 10 list for 2019 to the number two spot for 2020: concerns about economic conditions significantly restricting growth opportunities. While that risk had been in the top 10 list for six of the seven prior years we have conducted our surveys, it fell to the number 11 position in 2019. However, recent concerns about the overall strength of the global economy, particularly in light of the ongoing Brexit debate in the United Kingdom and Europe, perceived volatility in global trade discussions, declines in certain manufacturing sectors, and a general reduction in growth rates in major economies, have clearly heightened this risk looking forward to 2020. Respondents in four of the six industry groups we examined selected economic conditions as a top five risk concern. The new risk we added to the 2020 survey actually made it to this year's top 10 (tenth overall). Respondents are concerned about their ability to attract, retain and reskill/upskill talent needed for their organizations to adopt digital technologies (e.g., AI, robotics, natural language processing, among others). The remaining eight risks in the top 10 for 2020 were also in the top 10 for 2019, generally in similarly ranked positions.
- **Talent and culture risks and technology and innovation risks dominate the top 10 —** There are two overarching themes surrounding most of the top 10 risk concerns for 2020: talent and culture risks, and risks related to technology and innovation. These two themes are especially relevant as companies strive to advance their digital maturity and embrace the transformative potential of technology.
  - **Talent and culture:** Two of the top 10 risks have implications related to the organization's ability to attract and retain top talent (risk number three — concerns related to succession challenges and attracting/retaining top talent in a tightening market, and risk number 10 — concerns related to reskilling/upskilling the talent needed as a result of adopting AI-enabled digital technologies impacting the future of work). Two other risks present implications related to the organization's culture (risk number five — resistance to change, and risk number eight — culture surrounding the escalation of risk concerns).

TABLE OF CONTENTS

- **Technology and innovation:** Three of the top 10 risks have implications related to the organization's ability to embrace and manage technology and innovation (risk number four — existing operations, legacy IT systems and digital capabilities may not be sufficiently flexible to compete; risk number six — cyber threats; and risk number seven — privacy and information security issues). Regulatory concerns also surface in this discussion, as regulation can affect companies' ability to innovate and transform their business models. Furthermore, technology impacts customer preferences which, in turn, affect customer allegiance to brands failing to keep pace with market developments.

Interestingly, these two overarching themes are potentially interconnected given that the combined inability to attract and retain the right talent and ensure the appropriate culture is in place may negatively affect the organization's ability to execute increasingly complex strategies for navigating the rapidly changing digitally based global business environment. Talented people are interested in a work environment where they believe their skills will be appreciated and they can envision a path for success. In other words, they are much more focused on an organization's ambition, people and culture than they are its history or reputation. An organization's digital maturity and ability to innovate has a direct impact on its ability to source and keep the best and brightest.

- **Most executives concerned about economic conditions —** Concern about the overall economy is the top risk condition for board members, CEOs, CFOs and CIOs/CTOs. Clearly, economic conditions are top of mind for individuals in those positions. However, this concern did not make the top five list for CROs, CAEs or Other C-Suite positions. Risks related to the impact of regulatory change and heightened regulatory scrutiny on companies' business models and ability to innovate made the top five list in 2020 for all positions analyzed. Directors and most C-level positions are also concerned about the organization's overall resistance to change and how that might restrict the organization from making the necessary changes to the business model and core operations. That is a top five concern for board members, CFOs, CROs, CAEs and Other C-Suite respondents. Interestingly, CEOs are mostly concerned about macroeconomic risks, with four of their top five risks representing that category. In contrast, the top five risks for most other positions surveyed represent operational risk concerns with strategic underpinnings.

- **Concerns over operational capabilities have strategic underpinnings** — Six of the top 10 risks reflect operational risk concerns, suggesting on the surface that respondents continue to be focused on operational issues to a greater extent than strategic or macroeconomic risks. This remains consistent with 2019, when seven of the top 10 risks related to operational concerns. Uncertainties surrounding their organizations' infrastructure and core operations are creating challenges for their leaders to manage.

  However, these operational issues have strategic underpinnings, meaning they may present multiple considerations in strategy setting or may be perceived as a threat to successful execution of the strategy. It is possible that these considerations are on the minds of the executives rating them. For example:

  - Concerns regarding the ability to attract and retain talent that can take the business forward in the digital age, while operational in nature, have strategic implications. A digital-savvy leadership team supported by the requisite digital expertise is a strategic imperative. Without it, companies will have a difficult time articulating a coherent and compelling vision that will attract the talent needed to act on that vision and remain competitive.

- Inability to adjust technology-based operations and digital capabilities timely enough to compete with "born digital" organizations may necessitate tough decisions around allocation of scarce resources as part of the strategy-setting process to avoid outdated strategies and obsolete business models.
- Cybersecurity is a strategic imperative, as the occurrence of severe cyber incidents can impair the value of critical enterprise assets, e.g., intellectual property, market share, company reputation and brand image. Concerns around privacy may reflect uncertainty about the organization's ability to execute on its strategy and the potential for risk-averse behavior impacting competitive position.
- A dysfunctional culture that fosters resistance to change and frustrates the timely identification and escalation of critical matters can lead to missed opportunities, decision makers losing touch with business realities, and failure to achieve strategic objectives.

The point is that executives rating these matters may not be viewing them narrowly as day-to-day "blocking and tackling" issues.

Operational risks represent three of the top five risks for these size categories of organizations: revenues between $1 billion and $9.99 billion, and revenues between $100 million and $999 million. Two of the top 10 risks for the full sample represent macroeconomic risk concerns, while the remaining two represent strategic risk concerns. This is different than 2019, when none of top 10 risks were macroeconomic risks.

Other Notable Findings

- **Regulatory concerns persist, economic concerns vary across the globe —** The concern over increased regulation and its impact on how products and services are produced and delivered is shared by all regions — it ranks first or second in seven of the eight regions (third in North America) — and, as in the past, continues to be a significant risk. Perceptions of economic risks are like a swinging pendulum, with perceptions changing quickly over a short period of time as new developments transpire (including after our September-October survey data collection period). While economic concerns were only in the top five for some regions of the world in 2019, this risk concern made it to the top five list for seven of the eight regions of the world for 2020. Only North American-based organizations did not rate this risk as a top five risk for 2020.
- **Firms still likely to invest in risk management —** Interestingly, while respondents indicate that they are somewhat less likely to devote additional time or resources to risk identification and management over the next 12 months relative to their plans in the prior year, that level of investment is still higher than two years ago, suggesting a continued desire to invest in strengthening risk management efforts. This is especially true for financial services organizations that indicate the highest likelihood relative to other industries that they plan to devote additional time and resources toward risk management in 2020. Organizations with annual revenues between $1 billion and $9.99 billion also indicated the highest likelihood of enhancing their risk management capabilities relative to other sizes of organizations. The smallest organizations (revenues below $100 million) indicated a much lower likelihood of additional investment.

- **Relative consistency across different sized organizations —** Like previous years, there is consistency with respect to which risks make the top five list of risks for the four different sizes of organizations we analyze in our study. Concerns about restrictive and even disruptive regulatory changes, economic conditions in markets served, and whether existing operations are able to meet performance expectations set by "born digital" competitors or competitors with superior operations all appear in each group's top five list of risks. Given the overall results and the state of the economic cycle, it may not be surprising that each size group is noticeably concerned about the risks of achieving growth and the obstacles that stand in the way — increased regulation and lack of resiliency in existing operations, IT infrastructures and digital capabilities. Succession challenges and the ability to attract talent continue to be a top five concern for most organizations (except for very large organizations — those with revenues greater than $10 billion), which may not be that surprising given the tightening labor market, record low unemployment levels and continuing restrictions on sourcing foreign workers. All organizations, except those in the smallest category (those with revenues of $100 million or less), rated concerns about their organization's resistance to change, and how it may frustrate efforts to adjust the business model and core operations, as a top five risk concern. Even the smallest organizations rated this risk as sixth overall, suggesting that leadership of all organizations view change management as a major challenge.
- **Executives have differing views about the overall magnitude and severity of risks expected in the coming year —** There is variation in views among board members and C-suite executives regarding the magnitude and severity of risks for 2020 relative to prior years. Interestingly, chief financial officers (CFOs) and chief audit executives (CAEs) report the highest overall score about their impression regarding the magnitude and severity of risk for 2020 relative to board members, chief executive officers (CEOs), chief information/technology officers (CIOs/CTOs) and chief risk officers (CROs). There are noticeable differences in the changes in overall magnitude of risks from 2019 to 2020. While the overall magnitude of risk concerns declined for board members and CEOs from 2019, the overall magnitude of risk concerns increased for CFOs, CAEs and CROs, while remaining unchanged for CIOs/CTOs.

  Out of the 30 risks examined, CIOs/CTOs rate 13 of the 30 risks as "Significant Impact" risks. In contrast, CEOs only rated one of the 30 risks at that level, while CROs rated four at that level. Board members rated six of the 30 risks at the level, which is noticeably different than 2019, when board members rated 26 of the 30 risks at the "Significant Impact" level. CFOs rated eight of the 30 risks at the "Significant Impact" level. Considering how respondents rated the risks making the top five, board members, CFOs, CAEs and CIOs/CTOs rated all of their top five risks as "Significant Impact" risks, while CROs rated four of their top five risks at that level. Interestingly, CEOs only rated one of their top five risks at that level. The dispersion of these findings suggests there is a strong need for discussion and dialogue to ensure everyone is in agreement at the highest level of the organization as to what the most important risk exposures are and whether the organization is focused on them appropriately.
- **Most industries have reduced risk concerns for 2020 —** Our sub-analyses of results across six different industry groups finds that every group, with the exception of the Financial Services industry, perceived that the magnitude and severity of risks affecting their organizations will be lower in 2020 than in the prior year. The Healthcare industry group reflects the highest overall concern related to the magnitude and severity of risks. Except for the Energy and Utilities

industry group, all other industry groups decreased the number of "Significant Impact" risks from 2019 levels. Two of the 30 risks are deemed "Significant Impact" risks across all industry groups: restrictive/disruptive regulatory changes/scrutiny, and succession challenges and attracting/retaining top talent in a tightening market. Concerns about the organization's operations, legacy IT systems and digital capabilities not being able to compete with "born digital" enterprises are rated as a "Significant Impact" risk for all industry groups except Technology, Media and Telecommunications.

- **Nature of uncertainty concerns varies across the world —** There are noticeable differences in the views about the overall magnitude of risks for 2020 across different regions of the world. Interestingly, the overall magnitude of risks increased for respondents in North America-based organizations and Africa-based organizations. This is in contrast to respondents in all other regions of the world, who indicated a lower overall magnitude for 2020 relative to 2019. This suggests there are differences in overarching views about uncertainty in the business environment in different global regions. While respondents in organizations in Latin America believe the magnitude of risks for 2020 is lower than 2019, those respondents still indicate the highest overall magnitude of risks as compared to other parts of the world. Operational risks with strategic implications dominate most top five lists, led by the North America region, which includes four operational risks in the top five. In addition, the restrictive impact of regulatory changes and scrutiny on operational resilience, products and services appears on every region's top five list and economic conditions are a top five risk concern in every region except North America. Most regions of the world rate all of their top five risks as "Significant Impact" risks, except for European-based and African-based organizations, which rate four of their top five risks at that level.
- **There are similarities in risk viewpoints across for-profit and not-for-profit and governmental organizations —** Public companies, as well as not-for-profit and governmental organizations, rate all of their top five risks for 2020 at the "Significant Impact" level. Privately held for-profit companies rate only one risk, related to concerns over economic conditions, at the "Significant Impact" level. It is interesting that both private for-profit entities and not-for-profit and governmental organizations seem to view the overall risk landscape equally (both groups scored the overall magnitude and severity of risks in 2020 at 5.9), while the top risk concerns of not-for-profit and governmental organizations scored higher. The top four risks for both public and private companies are identical (though public companies uniformly scored them higher). The number one risk for both groups is a concern over deteriorating economic conditions in 2020. Likewise, the number two risk for both groups relates to the restrictive/disruptive impact of increased regulatory scrutiny in the coming year. The remaining top five risks for both groups are operational — and only the fifth risk is different for the two. All five of the top risks identified by not-for-profit and governmental organizations are operational risks that have strategic implications.

Overall Level of Risk Concerns for 2020

Before asking respondents to assess the importance of each of the 30 risks, we asked them to provide their overall impression of the magnitude and severity of risks their organization will be facing with respect to reaching or exceeding profitability (or funding) targets over the next 12 months. We provided them with a 10-point scale where 1 = "Extremely Low" and 10 = "Extremely High."

The respondents' overall response suggests a small decrease in the nature of the overall risk environment, with an average score of 6.1 in 2020 relative to 6.2 in 2019.

Consistent with this overall finding, our analysis of the list of top 10 global risks for 2020 finds that only the top two risks have higher average scores than the average scores for those same risks in the prior year. The average scores for the remaining eight risks in the 2020 top 10 are lower than the average scores in the prior year, suggesting that the overall magnitude of risk concern for most of the top 10 risks for 2020 is somewhat less than the prior year, except for the top two risk concerns. The list of top 10 global risks for 2020 appears in Figure 1, along with their corresponding 2019 and 2018 scores.

Respondents are mostly focused on operational risks relative to macroeconomic and strategic risk concerns, as six of the top 10 risks reflect operational issues. The dominance of concerns related to the capabilities of operations, systems, personnel and infrastructure from within the organization is overshadowing risks more external in nature. However, these risks have strategic underpinnings, as they may reflect uncertainty about organizations' ability to execute on their strategies.

Overall, what is your impression of the magnitude and severity of risks your organization will be facing with respect to reaching or exceeding profitability (or funding) targets over the next 12 months?	2020	2019	2018
	6.1	6.2	6.0

TABLE OF CONTENTS

Top 10 Risks for 2020

FIGURE 1

Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered

Economic conditions in markets we currently serve may significantly restrict growth opportunities for our organization

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 existing operations, legacy IT infrastructure, and insufficient embrace of digital thinking and capabilities may not meet performance expectations related to quality, time to market, cost and innovation as well as our competitors, especially new competitors that are "born digital" and with a low cost base for their operations, or established competitors with superior operations

Resistance to change may restrict our organization from making necessary adjustments to the business model and core operations

Our organization may not be sufficiently prepared to manage cyber threats that have the potential to significantly disrupt core operations and/or damage our brand

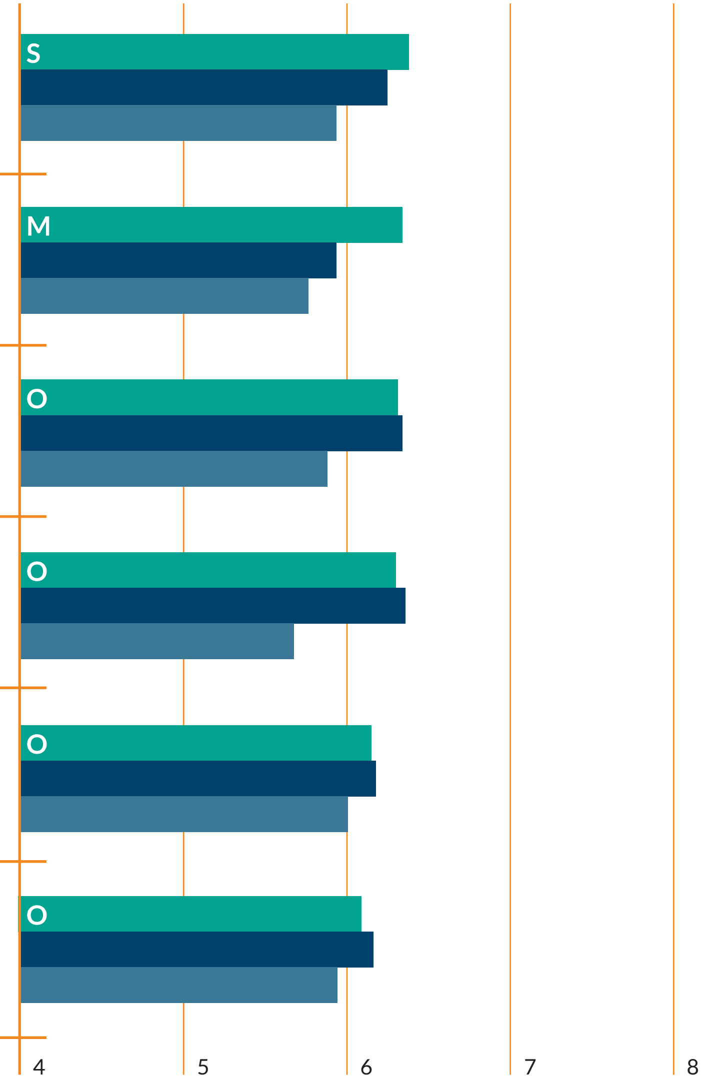
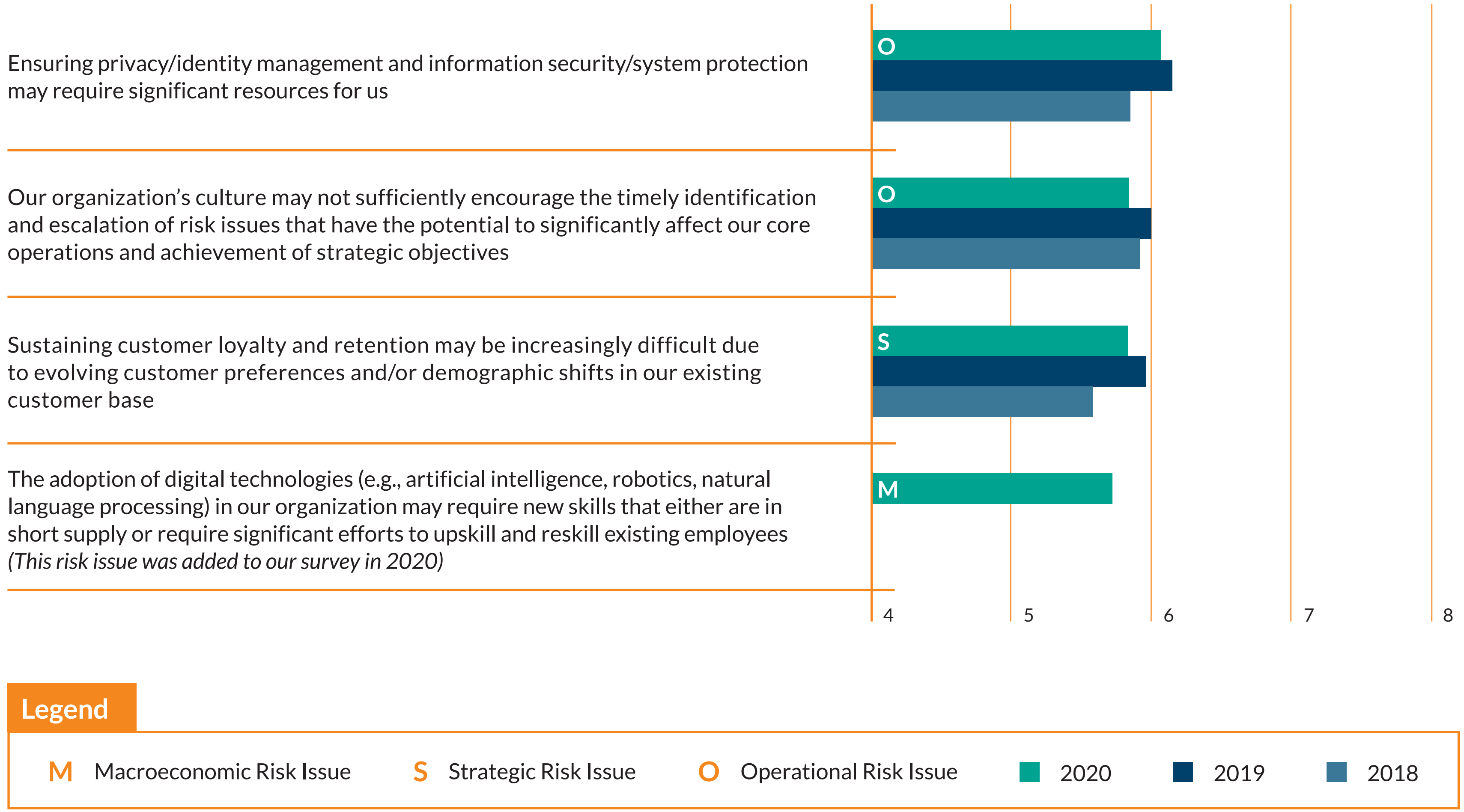


FIGURE 1 (CONTINUED)



Recall that risks with an average score of **6.0 or higher** are classified as **"Significant Impact"** risks, while risks with average scores of **4.5 through 5.99** are classified as having a **"Potential Impact"** for 2020. Risks with average scores **below 4.5** are classified as having a **"Less Significant Impact"** for 2020. As illustrated in Figure 1, seven of the top 10 risks for 2020 are deemed to be "Significant Impact" risks, with six of those seven risks deemed to be "Significant Impact" risks in the previous year's report, as well.

Table 2 reveals the percentage of respondents who scored each of the top 10 risks as "Significant Impact" risks (6 or higher), as well as the percentage of respondents who rated each as a 5 or 4 or below for 2020. Interestingly, a majority of respondents rated each of the top 10 risks as having a significant impact for 2020, suggesting that all of these risks have the potential to noticeably impact most organizations in the coming year.

Top 10 Risks (With Percentages of Responses by "Impact" Level)[3]

TABLE 2

RISK DESCRIPTION	HIGH	MEDIUM	LOW
	Significant Impact (6 — 10)	Potential Impact (4.5 — 5.99)	Less Significant Impact (1 — 4.49)
Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered	70%	10%	20%
Economic conditions in markets we currently serve may significantly restrict growth opportunities for our organization	70%	11%	19%
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	68%	13%	19%
Our existing operations, legacy IT infrastructure, and insufficient embrace of digital thinking and capabilities may not meet performance expectations related to quality, time to market, cost and innovation as well as our competitors, especially new competitors that are "born digital" and with a low cost base for their operations, or established competitors with superior operations	67%	12%	21%
Resistance to change may restrict our organization from making necessary adjustments to the business model and core operations	65%	10%	25%

[3] The risks presented in Table 2 are in the same top 10 risk order as reported in Figure 1. That list is based on each risk's overall average score (using our 10-point scale). Table 2 merely reflects the percentage of respondents selecting a particular point on the 10-point scale.

TABLE 2 (CONTINUED)

RISK DESCRIPTION	HIGH	MEDIUM	LOW
	Significant Impact (6 — 10)	**Potential Impact (4.5 — 5.99)**	**Less Significant Impact (1 — 4.49)**
Our organization may not be sufficiently prepared to manage cyber threats that have the potential to significantly disrupt core operations and/or damage our brand	66%	11%	23%
Ensuring privacy/identity management and information security/system protection may require significant resources for us	64%	12%	24%
Our organization's culture may not sufficiently encourage the timely identification and escalation of risk issues that have the potential to significantly affect our core operations and achievement of strategic objectives	61%	10%	29%
Sustaining customer loyalty and retention may be increasingly difficult due to evolving customer preferences and/or demographic shifts in our existing customer base	61%	12%	27%
The adoption of digital technologies (e.g., artificial intelligence, robotics, natural language processing) in our organization may require new skills that either are in short supply or require significant efforts to upskill and reskill existing employees *(This risk issue was added to our survey in 2020)*	56%	16%	28%

Overview of Top 10 Risks

The following section highlights risks comprising the overall top 10 list of risks for 2020:

1. **Regulatory change and heightened regulatory scrutiny impacting operational resilience and production and delivery of products and services —** Over the eight years we have conducted this survey, this risk has been in the number one or two spot for all years, except for the last two, when it was slightly lower but still in the list of top five risks. This risk continues to represent a major source of uncertainty among the majority of organizations, given that it returned once again to the number one spot for 2020, with 70% of respondents rating it as a significant risk. The overarching issue relates to perceived concerns about how all types of regulatory requirements and oversight seem to be expanding in multiple areas that may lead to even greater disruptions in business models and constrict companies' ability to innovate in certain areas. Expanding rules as to what is acceptable business practice are impacting all types of organizations, even those in nonregulated industries. Recent shifts in regulations related to privacy, product development and approval, the environment, social issues, and broader governance expectations are happening around the world and impacting any organization that wishes to do business outside its home-country borders. In addition, volatility in geopolitical views related to trade and tariff policies is leading to heightened awareness of what may seem like shifting sands in the rules and regulations organizations must monitor and obey. In effect, the regulatory climate adds uncertainty to an already disruptive business environment.

2. **Increased concern about economic conditions restricting growth prospects in relevant markets for most, but with some exceptions —** Concerns related to overall economic issues in domestic and international markets have significantly escalated for 2020 relative to the past two years. While economic concerns were rated highly in the first six years of our study, this risk concern fell to the number 11 position for 2019, only to return for 2020 as the number two risk concern, and 70% of respondents rate this as a significant risk issue for 2020. While the overall global economy remains relatively strong, there have been growing discussions, particularly in the United States, that the long streak of economic growth is likely to stall in the near term. While no one knows for sure, economic growth has, in fact, declined in the United States, China and other countries. In addition, volatility in equity markets, changes in the U.S. Federal Funds rate, actions by other central banks, multiple tariff and trade policy disputes and negotiations, and the continued uncertainty surrounding the United Kingdom's break from the European Union (i.e., Brexit) have executives on the edge of their seats wondering if an economic downturn lies ahead on the near-term horizon. It is important to note that concerns about the economy are in the top five list of risks for all regions of the world, except for organizations based in North America.

3. **Succession challenges and talent acquisition and retention —** The risk of succession challenges and the ability to attract and retain talent remains in the top five list of risks for 2020, in light of continued record-low unemployment in many regions of the world. Shifts in how individuals want to work and their ability to be nimble as to the nature of their work and how they want to live are straining the ability of organizations to attract and retain the talent needed. What's at stake is sustaining a workforce with the requisite talent and skills needed to think creatively in a rapidly changing digital marketplace, execute high-performance business models, and implement increasingly demanding growth strategies. To thrive in the digital age, organizations need to think and act digitally and have the capabilities to execute digital plans. This vital specialized knowledge and subject-matter expertise are becoming harder to acquire and retain on a cost-effective basis. Respondents continue to perceive that significant operational challenges may arise if organizations are unable to build and sustain a workforce with the skills needed to implement their growth strategies, forcing them to consider alternative forms of labor. For example, as companies shrink their "professional core," they are contracting essential non-core activities to outsiders through offshoring, outsourcing, or assignments to providers of managed services or business process as a service (BPaaS) to achieve specified results within the bounds of ethical, responsible business behavior. In addition, companies are deploying the contingent workforce, which taps into the so-called sharing, or gig, economy and is actively supported through staffing agencies, independent freelance workers, online staffing, crowdsourcing and the human cloud.

4. **Existing operations, infrastructure and digital capabilities unable to adjust to "born digital" or superior performing competitors —** Respondents remain noticeably concerned about the ability of their organization — relative to its competitors — to adjust existing operations, IT infrastructure and digital capabilities to meet performance expectations. That risk concern raced from the number 10 position in the top 10 list of risks for 2018 to the number one position for 2019. While dropping slightly to the number four position for 2020, it is nonetheless a significant risk issue for 67% of our respondents. This concern may be a composite of several significant uncertainties — the company's current state of digital readiness, its lack of resiliency and agility in staying ahead of or keeping pace with changing market realities, the restrictive burden of significant technical debt, the lack of out-of-the-box thinking about the business model and fundamental assumptions underlying the strategy, and the existence or threat of more nimble competitors. Hyperscalability of digital business models and lack of entry barriers enable new competitors to emerge and scale very quickly in redefining the customer experience, making it difficult for incumbents to see it coming at all, much less react in a timely manner to preserve customer loyalty. In this environment, established incumbents are increasingly impacted by "born digital" players who can alter the game by operating more efficiently, digitizing new and innovative products and services, enhancing the customer experience, and/or transforming the business model. This risk is a concern for all four size categories of organizations in our sample. For most companies today, it's not a question of if digital will upend their business, but when. Even when executives are aware of emerging technologies that obviously have disruptive potential, it is often difficult to clarify the vision or foresight that anticipates the nature and extent of change — particularly if the organization does not think or act digitally at its core.

5. **Resistance to change —** As major business model disruptors emerge, respondents are growing even more focused on their organization's potential unwillingness

or inability to make necessary timely adjustments to the business model and core operations that might be needed to respond to changes in the overall business environment and industry. Executives continue to be concerned about their ability to enable change, despite the reality that change has become a way of life for most companies. Whether covert or overt, resistance to necessary change spawned by disruptive innovations that alter business fundamentals can be catastrophic. Strategic error in the digital economy can result in the ultimate price if a company continues to play a losing hand in the marketplace. Coupled with concerns about the inability to adjust existing operations, IT infrastructure and digital capabilities to compete with more nimble competitors (the number four risk concern), respondents are highlighting the cultural concern related to the need for individuals to be nimble and open to change within their organizations. The blending of these two risks creates a potentially lethal combination.

6. **Managing cyber threats —** It is no surprise that threats related to cybersecurity remain a major concern as respondents focus on how such events might interrupt core operations. Cybersecurity is a moving target as innovative digital transformation initiatives, cloud computing adoptions, mobile device usage, robotics, machine and deep learning, and other applications of exponential increases in computing power continue to outpace the security protections many companies have in place. Increasingly sophisticated attacks on the human perimeter by perpetrators of cybercrime add to the uncertainty. There are two categories of organizations — those that have been breached and know it and those that have been breached but don't know it yet. Respondents are recognizing that reality, with two-thirds of our respondents rating this risk as a "Significant Impact" risk concern. However, it is interesting that cyber threats did not make the top five list of risks for any of our four size categories of organizations and, from an industry grouping standpoint, it was only in the top five list of risks for Manufacturing and Distribution as well as Energy and Utilities.

7. **Privacy and identity management —** Concerns over privacy and identity management are closely related to concerns related to cyber threats. However, it is important to realize that challenges related to maintaining data privacy and securing identity protection extend beyond hackers gaining access to systems. The proliferation of data gathered and stored for long periods of time across all types of organizations and across international borders is exponentially increasing operational challenges related to tracking, warehousing and protecting data. Accidental missteps in how organizations handle these operations may inadvertently reveal information deemed to be private or proprietary. This concern is likely linked to the proliferation of legislation to protect the privacy of personal information. Initiated in the European Union and spreading to the United States and elsewhere across the planet, such legislation has created enormous complexities for business with the teeth of potential fines, penalties and reputation loss that cannot be ignored. As the expanding digital economy enables businesses and third-party organizations to house sensitive information obtained in many ways, fresh exposures to that information present themselves, raising questions such as:

— How much data is too much data?

— Does the organization place effective guardrails around data collection to manage its risk? Or does it collect all of the information it can, understanding that there may be opportunities to monetize that data in some way provided there is compliance with applicable laws and regulations?

— Is the return on investment on the monetization effort sufficient to make the trouble in collecting and managing data and the related risks worthwhile? But even if it is worthwhile, is it really integral to the strategy for driving shareholder value?

As these are tough questions, it is no surprise that 64% of our respondents rate this risk as “Significant Impact” for their organization.

8. **Culture may not encourage timely escalation of risk issues —** Respondents continue to highlight the need for attention to be given to the overall culture of the organization to ensure it is sufficient to encourage the timely identification and escalation of risk issues. This risk issue was added to our 2015 risk survey, and it has been ranked in the top 10 risks each year since that time. It is a risk that executives may want to focus their attention on given it signals a noticeable concern that employees across the organization may be aware of risks but, for whatever reason, are reluctant to escalate those risks to executive management or the board. That reluctance may be triggered by the lack of knowledge among employees about the process they should use to escalate risk concerns. Alternatively, it may be triggered by a dysfunctional culture problem that reflects employees’ overall fear about the retribution they might experience if they were to escalate a risk concern. The presence of this risk, coupled with concerns over resistance to change, reflects on the state of the organization’s overall culture. Executive teams and their boards of directors may benefit from an honest assessment of how their organization’s existing culture might impact overall risk awareness across the entity and may represent an important first step for leaders to consider as they think about risks on the horizon for their organization.

9. **Sustaining customer loyalty and retention may be becoming increasingly difficult —** Concern about the organization’s ability to sustain its existing customer base considering changing demographics resurfaced in the top 10 list of risks for 2020 and 2019 after dropping out of the top 10 in 2018. Younger generations who have grown up in a technology-centric world are rapidly embracing digital technologies that are transforming all kinds of ways organizations have historically delivered their products and services. The growing presence of app-based platforms, digital marketing, and other online ordering and delivery services is shocking many of the traditional forms of customer interactions. If organizations cannot adjust their operations, legacy IT infrastructure and digital capabilities (see risk number four in the top 10 list), they may not meet the expectations of their core customers in a manner sufficient to retain their loyalty. This risk is important because companies with high churn rates incur significant costs in replacing lost customers. Sustaining customer loyalty and retention is about increasing profitability through superior top-line performance and reduced marketing costs and other costs associated with educating new customers.

10. **The adoption of digital technologies in transforming the business may require new skills that the organization may not be able to attract or retain —** This risk, which is new for our 2020 survey, debuted in the top 10, given an overall concern among survey respondents that the adoption of digital technologies, such as those enabled by AI, robotics and natural language processing in their organizations, may require new skills that either are in short supply or require significant efforts to upskill and reskill existing employees. For example, AI-enabled technologies will greatly influence — often by enabling and sometimes by making more complex — how companies design and manage their labor models. As the future world of work evolves, organizations need to optimize their mix of internal, contracted and interim human talent and electronic workers (machines and algorithms). This task entails freeing work from the entity’s current jobs structure —

displacing a significant number of existing job roles — and reorganizing it in a different framework of discrete, deconstructed units executed through a range of approaches, relationships and technologies. As noted earlier, these sources might include — on the human side — outsourcing and offshoring, consulting partnerships, interim staffing, BPaaS relationships, managed services, and a variety of human cloud arrangements. But they also include a technology side, e.g., traditional robotic process automation and AI-enabled technologies that both displace existing skills and demand new skills. Simply stated, technology is expected to support and shape the components of the workforce by offering additional capabilities that will increase quality, compress elapsed time, reduce costs and enhance scalability, if applied intelligently. This reality is one that no management team or board, desiring to be on the right side of the competitive balance, can fail to address. Organizations need to have the talent and skills to fully embrace digital technologies in an environment where the competition for talent, especially individuals with the knowledge, skills and knowhow to integrate those innovations into already existing processes, is intense. Without access to the talent that understands the technologies and how they may be deployed, organizations may find themselves behind competitors who can react quickly to assimilate innovations into the business. Such talent lacks abundance.

"The list of top 10 risks reinforces the reality that risks cannot be viewed in a siloed, individual fashion. Four of the top 10 have interrelated implications related to talent and culture, while three additional risks have implications related to technology and innovation. When considered holistically, an ability to attract and retain talent needed to run the business and to ensure the appropriate culture is in place may negatively affect the organization's ability to navigate the rapidly changing, digitally based global business environment. An enterprise-wide approach to risk management strengthens leadership's ability to recognize these important interconnected realities."

Mark Beasley, Professor of Enterprise Risk Management and Director of the ERM Initiative, Poole College of Management, NC State University

TABLE OF CONTENTS

Biggest and Smallest Changes in Individual Risks from Prior Year

In order to highlight the most dramatic shifts in perceptions, we also investigated which risks increased the most from 2019 to 2020. Only two of the 30 risks have average scores that are higher than the average scores in 2019. One risk is unchanged from 2019, while all other risks actually decreased from 2019 levels (one risk was new to this year's survey so is omitted from this discussion). In Table 3, we show the two risks that increased from 2019 in addition to the one risk that remained the same and the two risks that had the smallest decrease from 2019.

The risk with the highest increase over 2019 is a macroeconomic risk, as concerns about uncertainties related to economic conditions in markets where organizations operate are heightened among respondents across the full sample. Similarly, the strategic risk concern that regulatory changes and heightened regulatory scrutiny may affect the manner in which products or services are produced or delivered also increased over 2019. Concerns related to global political uncertainties and potential changes in key global leaders continue to be on the minds of respondents at similar levels to those in 2019 as they assess whether these events may have an impact on the macroeconomic environment that impacts the business model of their organization.

Again, the remaining 26 risks actually decreased from 2019. The two risks with the smallest level of decrease represent operational risk concerns. These relatively small decreases suggest that respondents remain concerned about resistance to change within the organization that may make it more difficult for needed change in the business model or core operations to occur when it should. And, their concerns about ensuring privacy and identity management continue to be about the same as in the prior year.

"Concerns over economic conditions and their potential to significantly restrict growth opportunities in key markets increased the most in this year's survey in relation to last year's, which was completed just before a significant correction in the equity markets due to rising concerns over trade, interest rates and a flattening yield curve. Now a year later after modest 2019 growth and continuing economic headwinds, uncertainty is greater amid concerns that growth into 2020 is decelerating."

Jim DeLoach, Managing Director, Protiviti

The Five Risks with Highest Level of Increase (or Smallest Decrease)

TABLE 3

RISK DESCRIPTION	Type of Risk	2020	2019	Increase or Smallest Decrease
Economic conditions in markets we currently serve may significantly restrict growth opportunities for our organization	Macroeconomic	6.34	5.93	.41
Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered	Strategic	6.38	6.24	.14
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	Macroeconomic	5.12	5.12	.00
Resistance to change may restrict our organization from making necessary adjustments to the business model and core operations	Operational	6.15	6.17	-.02
Ensuring privacy/identity management and information security/system protection may require significant resources for us	Operational	6.06	6.13	-.07

We also examined those risks with the greatest reduction in risk impact scores from 2019 to 2020 (see Table 4). Three of these risks are strategic in nature, which may indicate more confidence in the strategic directions of the firms in our response base.

The Five Risks with Highest Level of Decrease

TABLE 4

RISK DESCRIPTION	Type of Risk	2020	2019	Increase or Smallest Decrease
The behaviors and personal conduct of the organization's management team and other key representatives may not conform to societal and ethical expectations	Operational	4.29	5.44	-1.15
Social media, mobile applications and other Internet-based applications may significantly impact our brand, customer relationships, regulatory compliance processes and/or how we do business.	Strategic	5.07	5.76	-0.69
Geopolitical shifts and instability in governmental regimes or expansion of global terrorism may restrict the achievement of our global growth and profitability objectives	Macroeconomic	4.65	5.27	-0.62
Substitute products and services may arise that affect the viability of our current business model and planned strategic initiatives	Strategic	5.07	5.63	-0.56
Performance shortfalls may trigger activist shareholders who seek significant changes to our organization's strategic plan and vision	Strategic	4.60	5.14	-0.54

Respondents are noticeably less concerned in 2020 relative to 2019 about whether the behaviors and personal conduct of the organization's management team and other key representatives may not conform to societal and ethical expectations. Following the extensive focus on a number of alleged ethical missteps of top executives in the financial press and other news sources, respondents do not view that risk to be as high as they once perceived. Three of the other risks with the highest declines in 2020 from 2019 all involve strategic risks. Respondents are less concerned about how social media might disrupt their business and they are concerned less about the potential for competitors to introduce substitute products or services. There also is relatively less concern about the emergence of shareholder activists who might impose significant changes on their organization's strategic plan. Finally, concerns about geopolitical shifts and global terrorism are lessened from the prior year, as indicated by the decrease in that macroeconomic risk for 2020.

Three-Year Comparison of Risks

We provide an analysis of the overall three-year trends for the 30 risks surveyed this year. As discussed previously, to help identify differences in risk concerns across respondent type, we group all the risks based on their average scores into one of three classifications. Consistent with our prior studies, we use the following color-coding scheme to highlight risks visually using these three categories.

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	●

In Table 5, we summarize the impact assessments for each of the 30 risks for the full sample arranged by the three categories of risks we analyze: macroeconomic, strategic and operational. For each risk, the column labeled "2020 Rank" indicates that risk's relative position among the 30 risks for 2020, with rank "1" representing the risk with the highest overall impact score for 2020.

We also show in Table 5 the color code for the 28 risks examined in all three years. Recall that we added a new risk to the 2020 report (and one new risk was also added in the 2019 study). Thus, we only show results for this year for the one new risk and for the last two years for the additional risk added last year for the 2019 study.

Seven of the 30 risks are rated as "Significant Impact" risks for 2020, which is mostly consistent with 2019, when eight of the 30 risks were rated at that level. Both 2019 and 2020 are noticeably higher in the number of risks rated as "Significant Impact" as compared to 2018, when only two of 30 risks were rated at that level.

Six of the seven risks rated as "Significant Impact" risks for 2020 were also "Significant Impact" risks in the prior year. Thus, there is general consistency in the level of ratings between the two years. The only risk rated at that level in 2020 that was not at that level in the prior year is the concern about whether economic conditions in markets companies currently serve may significantly restrict growth opportunities. That risk was rated as a "Potential Impact" risk for 2019. Interestingly, concerns about the rapid speed of disruptive innovations enabled by new and emerging technologies fell to the "Potential Impact" level for 2020 after being deemed a "Significant Impact" risk for the past two years. When viewing the nature of the top 10 risks — which include risks associated with the ability to adjust operations, IT infrastructure and digital capabilities to fend off threats from "born digital" players, resistance to change, talent acquisition and retention challenges, uncertainty over cyber and privacy issues, customer loyalty concerns, regulatory threats, and the effect of AI-enabled technologies on the future of work — this decline is likely because respondents in prior surveys were concerned about the *potential for disruptive change*, whereas now they are concerned about the *disruption that is already upon them*. Finally, only one of the 30 risks has an overall score that falls into the "Less Significant Impact" category for 2020.

For the most part, the relative significance of all the risks in the macroeconomic and strategic categories has remained consistent for all three years, as observed by the consistency in color reflected for most risks across the three years reported. We do observe a marked change in the operational risk category, however. Here, we see five of the 10 risk concerns rated as "Significant Impact" in 2020, and six of the 10 in this category in 2019, both of which represent a dramatic increase from 2018 (only one risk in this category).

"We find that heightened concern over increased regulatory scrutiny is shared worldwide — it ranks first or second in seven of the eight regions (third in North America) — and, as in the past, continues to be a significant risk issue. As political regimes change and evolve, it is natural to focus on how these changes may manifest in new and different regulatory approaches."

Bruce Branson, Professor of Accounting, Associate Director, Enterprise Risk Management Initiative, Poole College of Management, NC State University

Perceived Impact for 2020 Relative to Prior Years — Full Sample

TABLE 5

MACROECONOMIC RISK ISSUES	2020 RANK	2020	2019	2018
Economic conditions in markets we currently serve may significantly restrict growth opportunities for our organization	2	●	●	●
The adoption of digital technologies (e.g., artificial intelligence, robotics, natural language processing) in our organization may require new skills that either are in short supply or require significant efforts to upskill and reskill existing employees (new in 2020)	10	●	N/A	N/A
Unexpected change in the current interest rate environment may have a significant effect on the organization's operations	17	●	●	●
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	18	●	●	●
Anticipated increases in labor costs may affect our opportunity to meet profitability targets	19	●	●	●
Anticipated volatility in global financial markets and currency exchange rates may create significantly challenging issues for our organization to address	23	●	●	●
Evolving changes in global trade policies (e.g., Brexit, NAFTA update, escalating tariffs) may limit our ability to operate effectively and efficiently in international markets	24	●	●	●
Our ability to access sufficient capital/liquidity may restrict growth opportunities for our organization	25	●	●	●
Geopolitical shifts and instability in governmental regimes or expansion of global terrorism may restrict the achievement of our global growth and profitability objectives	28	●	●	●

TABLE 5 (CONTINUED)

STRATEGIC RISK ISSUES	2020 RANK	2020	2019	2018
Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered	1	🔴	🔴	🟡
Sustaining customer loyalty and retention may be increasingly difficult due to evolving customer preferences and/or demographic shifts in our existing customer base	9	🟡	🟡	🟡
Rapid speed of disruptive innovations enabled by new and emerging technologies (e.g., artificial intelligence, robotics, machine learning, hyperscalable platforms) 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	12	🟡	🔴	🔴
Our organization may not be sufficiently prepared to manage an unexpected crisis significantly impacting our reputation	13	🟡	🟡	🟡
Opportunities for organic growth through customer acquisition and/or enhancement may be significantly limited for our organization	15	🟡	🟡	🟡
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	16	🟡	🟡	🟡
Growth through acquisitions, joint ventures and other partnership activities may be difficult to identify and implement	20	🟡	🟡	🟡
Social media, mobile applications and other Internet-based applications may significantly impact our brand, customer relationships, regulatory compliance processes and/or how we do business	21	🟡	🟡	🟡
Substitute products and services may arise that affect the viability of our current business model and planned strategic initiatives	22	🟡	🟡	🟡

TABLE 5 (CONTINUED)

STRATEGIC RISK ISSUES (CONTINUED)	2020 RANK	2020	2019	2018
Shifts in environmental, social and governance (ESG) preferences as well as expectations of key stakeholders about climate change, diversity and inclusion, and other sustainability issues may be difficult for us to identify and address on a timely basis	26	🟡	🟡	🟡
Performance shortfalls may trigger activist shareholders who seek significant changes to our organization's strategic plan and vision	29	🟡	🟡	🟡

OPERATIONAL RISK ISSUES	2020 RANK	2020	2019	2018
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	3	🔴	🔴	🟡
Our existing operations, legacy IT infrastructure, and insufficient embrace of digital thinking and capabilities may not meet performance expectations related to quality, time to market, cost and innovation as well as our competitors, especially new competitors that are "born digital" and with a low cost base for their operations, or established competitors with superior operations	4	🔴	🔴	🟡
Resistance to change may restrict our organization from making necessary adjustments to the business model and core operations	5	🔴	🔴	🔴
Our organization may not be sufficiently prepared to manage cyber threats that have the potential to significantly disrupt core operations and/or damage our brand	6	🔴	🔴	🟡
Ensuring privacy/identity management and information security/system protection may require significant resources for us	7	🔴	🔴	🟡

TABLE 5 (CONTINUED)

OPERATIONAL RISK ISSUES (CONTINUED)	2020 RANK	2020	2019	2018
Our organization's culture may not sufficiently encourage the timely identification and escalation of risk issues that have the potential to significantly affect our core operations and achievement of strategic objectives	8	●	●	●
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	11	●	●	●
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	14	●	●	●
Uncertainty surrounding the viability of key suppliers, scarcity of supply, or stable supply prices may make it difficult to deliver our products or services at acceptable margins	27	●	●	●
The behaviors and personal conduct of the organization's management team and other key representatives may not conform to societal and ethical expectations (new in 2019)	30	●	●	N/A

The remainder of this report 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 106 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.

Analysis Across Different Sizes of Organizations

The sizes of organizations, as measured by total revenues, vary across our 1,063 respondents, as shown below. The mix of sizes of organizations represented by respondents is relatively similar to the mix of respondents in our prior years' surveys. Almost 68% of our respondents are in organizations with revenues between $100 million and $10 billion.

MOST RECENT REVENUES	NUMBER OF RESPONDENTS
Revenues $10 billion or greater	163
Revenues $1 billion to $9.99 billion	381
Revenues $100 million to $999 million	337
Revenues less than $100 million	182
Total Number of Respondents	**1,063**

The overall outlook about risk conditions differs slightly across sizes of organizations. We asked respondents to provide their overall impression of the magnitude and severity of risks their organization will be facing with respect to reaching or exceeding profitability (or funding) targets over the next 12 months, using a 10-point scale where 1 = "Extremely Low" and 10 = "Extremely High." The three largest size categories of organizations (those with revenues above $100 million) all perceive a slight decrease (or no change) in the magnitude and severity of risks for their organizations, while the smallest organizations indicated that the magnitude and severity of risks has increased from 2019 to 2020. As in prior years, the smallest-sized organizations are also the least concerned relative to organizations in the other size categories.

The overall magnitude and severity of risks is believed to be highest among the two categories of largest organizations and declines in step with the size strata we explore. There was a significant increase in the perception of the magnitude and severity of risks from 2018 to 2019 for our largest firms, but that increased perception was somewhat attenuated in the most recent year.

Overall, what is your impression of the magnitude and severity of risks your organization will be facing with respect to reaching or exceeding profitability (or funding) targets over the next 12 months?	2020	2019	2018
Organizations with revenues $10 billion or greater	6.3	6.5	5.9
Organizations with revenues between $1 billion and $9.99 billion	6.3	6.3	6.1
Organizations with revenues between $100 million and $999 million	6.0	6.2	6.1
Organizations with revenues less than $100 million	5.9	5.5	5.5

Concern about the impact of regulatory changes and expanded regulatory scrutiny on operational resilience and the production and delivery of products and services, as well as uncertainties over economic conditions in markets served and whether existing operations, legacy IT infrastructure and digital capabilities are able to meet performance expectations, all appear in each size category's top five list of risks. Given the overall results and the state of the economic cycle, it may not be surprising that each group is noticeably concerned about the risks of achieving growth and the obstacles that stand in the way — regulation and the inadequacies of existing operations, infrastructures and digital capabilities.

Consistent with our findings related to the overall top 10 risks for 2020 for the full sample, operational risks, albeit with strategic underpinnings, largely appear in the top five risks for each of the size categories of organizations. For each size category, at least two of the top five risks are operational in nature, while for those organizations with revenues between $100 million and $10 billion, three of the top five are in this category. Succession challenges and the ability to attract and retain talent continue to be a top five concern for most organizations, except very large organizations — those with revenues greater than $10 billion. That finding may not be that surprising given the tightening labor market, record low unemployment rates and continuing restrictions on recruiting foreign workers.

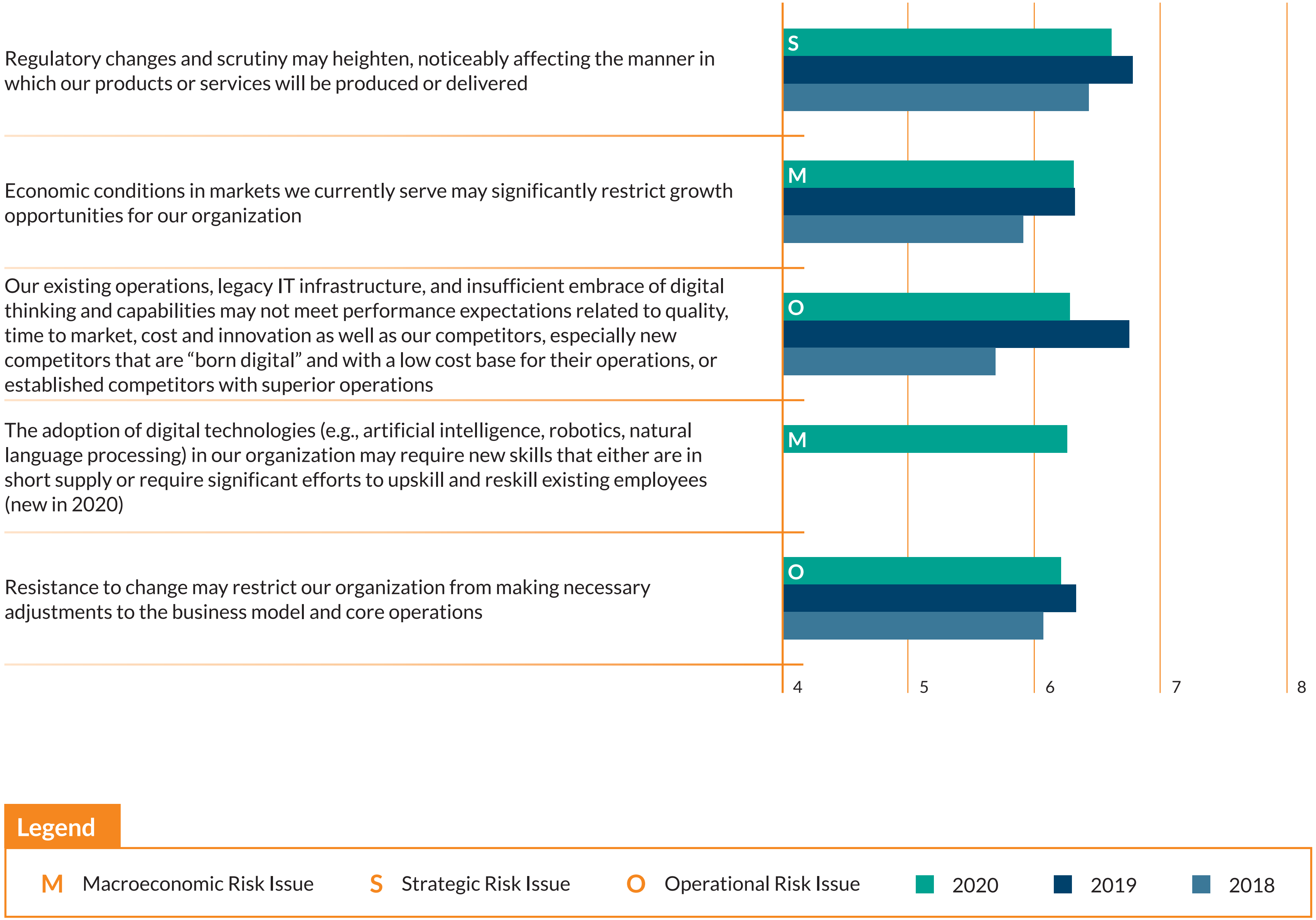
All organizations, except those in the smallest category (those with revenues of $100 million or less), rated concerns about their organization's resistance to change and how it may restrict them from adjusting their business model and core operations as a top five risk issue. Even the smallest organizations rated this risk as sixth overall, suggesting that leadership of all organizations views change management as a major challenge that needs to be monitored and addressed.

Except for the smallest organizations (those with revenues less than $100 million), all other sizes of organizations rated all of their top five risks as "Significant Impact" risks (i.e., each risk had an average score of greater than or equal to 6.0). For the smallest organizations, only their top-rated risk — concern about economic conditions in markets currently served — was rated as a "Significant Impact" risk.

The accompanying charts summarize the top-rated risks by size of organization. Only the top five risks are reported.

TABLE OF CONTENTS

Rev $10B or Greater



Rev $1B to $9.9B


Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered
S
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
O
Our existing operations, legacy IT infrastructure, and insufficient embrace of digital thinking and capabilities may not meet performance expectations related to quality, time to market, cost and innovation as well as our competitors, especially new competitors that are "born digital" and with a low cost base for their operations, or established competitors with superior operations
O
Economic conditions in markets we currently serve may significantly restrict growth opportunities for our organization
M
Resistance to change may restrict our organization from making necessary adjustments to the business model and core operations
O
4
5
6
7
8
Legend
M Macroeconomic Risk Issue
S Strategic Risk Issue
O Operational Risk Issue
2020
2019
2018

TABLE OF CONTENTS

Rev $100M to $999M

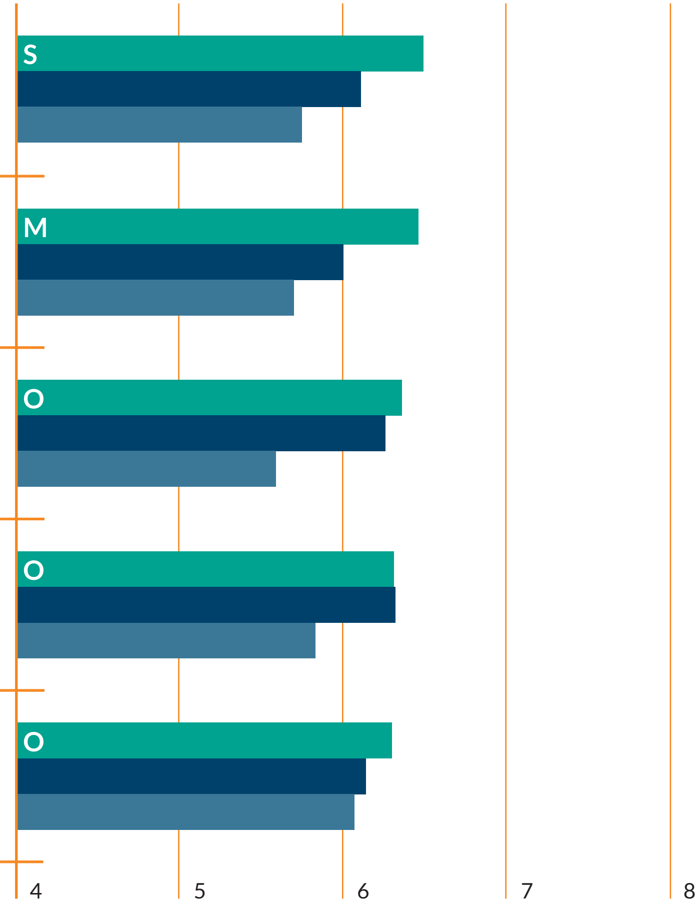
Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered

Economic conditions in markets we currently serve may significantly restrict growth opportunities for our organization

Our existing operations, legacy IT infrastructure, and insufficient embrace of digital thinking and capabilities may not meet performance expectations related to quality, time to market, cost and innovation as well as our competitors, especially new competitors that are "born digital" and with a low cost base for their operations, or established competitors with superior operations

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

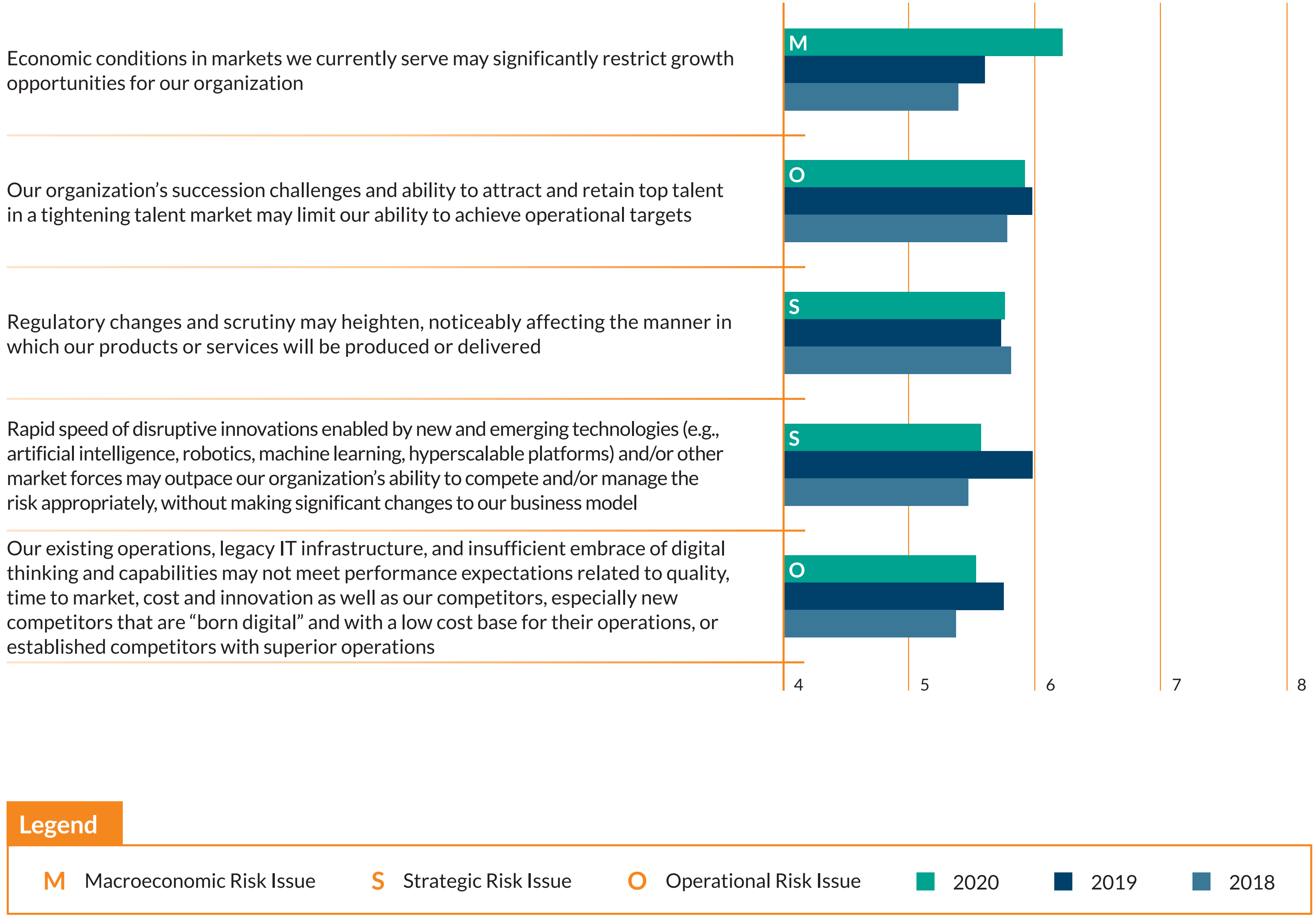
Resistance to change may restrict our organization from making necessary adjustments to the business model and core operations



Legend

M Macroeconomic Risk Issue   S Strategic Risk Issue   O Operational Risk Issue   2020   2019   2018

Rev Less than $100M



Analysis Across Executive Positions Represented

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 2020. Respondents to the survey serve in a number of different board and executive positions. The remaining respondents represent individuals currently serving in a variety of executive positions. We received responses from 120 members of a board of directors, and it is reasonable to expect that some CEOs and perhaps other C-level executives also serve on a board.

EXECUTIVE POSITION	NUMBER OF RESPONDENTS
Board of Directors	120
Chief Executive Officer	53
Chief Financial Officer	112
Chief Risk Officer	216
Chief Audit Executive	223
Chief Information/Technology Officer	35
Other C-Suite[4]	86
All other[5]	218
Total Number of Respondents	**1,063**

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

[5] These 218 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.

To determine if perspectives about top risks differ across executive positions, we also analyzed key findings for boards of directors and the six executive positions with the greatest number of respondents: chief executive officer (CEO), chief financial officer (CFO), chief risk officer (CRO)[6], chief audit executive (CAE), chief information/technology officer (CIO/CTO), and Other C-Suite executives.

Similar to our analysis of the full sample and across the different sizes of organizations, we analyzed responses about overall impressions of the magnitude and severity of risks across the above types of respondents. Again, the scores in the table below reflect responses to the question about their overall impression of the magnitude and severity of risks their organization will be facing with respect to reaching or exceeding profitability (or funding) targets over the next 12 months, using a 10-point scale where 1 = "Extremely Low" and 10 = "Extremely High."

The overall impression among executives with respect to the magnitude and severity of risks in the environment is decidedly mixed. CFOs and CAEs have significantly increased their 2020 risk expectations relative to 2019. These respondents rated the magnitude and severity of risks for 2020 at the highest level among all executives. This increase in risk expectations may be the result of overall concern about how quickly business conditions and expectations for oversight are changing, as well as how quickly it could change going forward, particularly as it relates to operations. Board members, CEOs, and Other C-Suite executives lowered their future impressions of the risk environment, with the decrease for Other C-Suite executives being dramatic. CROs and CIOs/CTOs remained fairly consistent from 2019 to 2020.

Overall, what is your impression of the magnitude and severity of risks your organization will be facing with respect to reaching or exceeding profitability (or funding) targets over the next 12 months?	2020	2019	2018
Board of Directors	6.2	6.7	6.4
Chief Executive Officer	5.8	6.4	5.9
Chief Financial Officer	6.5	6.0	6.3
Chief Risk Officer	6.0	5.9	5.5
Chief Audit Executive	6.4	6.0	6.4
Chief Information/Technology Officer	6.2	6.2	6.3
Other C-Suite	5.5	6.8	6.0

[6] We grouped individuals with different but equivalent executive titles into these positions when appropriate. For example, we included "Vice President — Risk Management" with the CRO group and "Director of Finance" was included with the CFO group.

There is a contrast in perspectives across the various positions, which suggests there may be value in explicitly discussing and analyzing factors that might be influencing overall impressions about the risk environment among key leaders, especially at the highest level of the organization. Thus, enterprise risk assessments would benefit from the influx of multiple perspectives.

Consistent with prior reports, we use the color-coding scheme below to highlight risks visually using three categories. In Table 6, we provide a summary of the impact assessments for each of the 30 risks for the full sample and for each category of executive using this color-coding scheme.

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	●

"Our review of this year's top risks suggests that directors and executives are very concerned about competition with 'born digital' companies, shifts in the economy and the impact of regulation (including privacy) on their ability to transform. These issues are inextricably linked to concerns around the ability to attract talented leaders who can take the business forward in the digital age and organizational resistance to change; these concerns could relate to fears that the organization's leaders are not digital ready and change is needed, but not attainable due to cost and cultural constraints and inability to attract the necessary talent. Some may view clinging to the status quo as risk averse behavior, but as many organizations have found to their peril in recent years, in the digital age this positioning is rarely successful medium term."

Jonathan Wyatt, Managing Director, Global Leader, Protiviti Digital

TABLE OF CONTENTS

• • • Role

TABLE 6

MACROECONOMIC RISK ISSUES	BOARD	CEO	CFO	CRO	CAE	CIO/ CTO	OTHER C-SUITE
Economic conditions in markets we currently serve may significantly restrict growth opportunities for our organization	🔴	🔴	🔴	🟡	🔴	🔴	🟡
Unexpected change in the current interest rate environment may have a significant effect on the organization's operations	🟡	🟡	🟡	🟡	🟡	🔴	🟡
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	🟡	🟡	🟡	🟡	🟡	🟡	🟡
The adoption of digital technologies (e.g., artificial intelligence, robotics, natural language processing) in our organization may require new skills that either are in short supply or require significant efforts to upskill and reskill existing employees (new in 2020)	🟡	🟡	🟡	🟡	🟡	🟡	🟡
Anticipated increases in labor costs may affect our opportunity to meet profitability targets	🟡	🟡	🟡	🟡	🟡	🟡	🟡
Anticipated volatility in global financial markets and currency exchange rates may create significantly challenging issues for our organization to address	🟡	🟡	🟡	🟡	🟢	🟡	🟡
Evolving changes in global trade policies (e.g., Brexit, NAFTA update, escalating tariffs) may limit our ability to operate effectively and efficiently in international markets	🟡	🟡	🟡	🟢	🟡	🟡	🟢
Geopolitical shifts and instability in governmental regimes or expansion of global terrorism may restrict the achievement of our global growth and profitability objectives	🟡	🟡	🟡	🟢	🟢	🟡	🟢
Our ability to access sufficient capital/liquidity may restrict growth opportunities for our organization	🟡	🟡	🟡	🟢	🟢	🟡	🟢

TABLE 6 (CONTINUED)

STRATEGIC RISK ISSUES	BOARD	CEO	CFO	CRO	CAE	CIO/ CTO	OTHER C-SUITE
Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered	🔴	🟡	🔴	🔴	🔴	🔴	🔴
Opportunities for organic growth through customer acquisition and/or enhancement may be significantly limited for our organization	🔴	🟡	🟡	🟡	🟡	🟡	🟡
Sustaining customer loyalty and retention may be increasingly difficult due to evolving customer preferences and/or demographic shifts in our existing customer base	🟡	🟡	🟡	🟡	🟡	🔴	🟡
Rapid speed of disruptive innovations enabled by new and emerging technologies (e.g., artificial intelligence, robotics, machine learning, hyperscalable platforms) 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	🟡	🟡	🟡	🟡	🟡	🔴	🟡
Our organization may not be sufficiently prepared to manage an unexpected crisis significantly impacting our reputation	🟡	🟡	🟡	🟡	🟡	🔴	🟡
Social media, mobile applications and other Internet-based applications may significantly impact our brand, customer relationships, regulatory compliance processes and/or how we do business	🟡	🟡	🟡	🟡	🟡	🔴	🟡
Growth through acquisitions, joint ventures and other partnership activities may be difficult to identify and implement	🟡	🟡	🟡	🟡	🟡	🟡	🟡
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	🟡	🟡	🟡	🟡	🟡	🟡	🟡

TABLE 6 (CONTINUED)

STRATEGIC RISK ISSUES (CONTINUED)	BOARD	CEO	CFO	CRO	CAE	CIO/ CTO	OTHER C-SUITE
Substitute products and services may arise that affect the viability of our current business model and planned strategic initiatives	🟡	🟡	🟡	🟡	🟡	🟡	🟡
Shifts in environmental, social and governance (ESG) preferences as well as expectations of key stakeholders about climate change, diversity and inclusion, and other sustainability issues may be difficult for us to identify and address on a timely basis	🟡	🟢	🟡	🟢	🟢	🟡	🟢
Performance shortfalls may trigger activist shareholders who seek significant changes to our organization's strategic plan and vision	🟡	🟢	🟡	🟢	🟢	🟡	🟢

OPERATIONAL RISK ISSUES	BOARD	CEO	CFO	CRO	CAE	CIO/ CTO	OTHER C-SUITE
Resistance to change may restrict our organization from making necessary adjustments to the business model and core operations	🔴	🟡	🔴	🔴	🔴	🔴	🟡
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 existing operations, legacy IT infrastructure, and insufficient embrace of digital thinking and capabilities may not meet performance expectations related to quality, time to market, cost and innovation as well as our competitors, especially new competitors that are "born digital" and with a low cost base for their operations, or established competitors with superior operations	🟡	🟡	🔴	🔴	🔴	🔴	🔴

TABLE OF CONTENTS

TABLE 6 (CONTINUED)

OPERATIONAL RISK ISSUES (CONTINUED)	BOARD	CEO	CFO	CRO	CAE	CIO/ CTO	OTHER C-SUITE
Our organization may not be sufficiently prepared to manage cyber threats that have the potential to significantly disrupt core operations and/or damage our brand	🔴	🟡	🔴	🟡	🔴	🔴	🟡
Ensuring privacy/identity management and information security/ system protection may require significant resources for us	🔴	🟡	🔴	🟡	🟡	🔴	🟡
Our organization's culture may not sufficiently encourage the timely identification and escalation of risk issues that have the potential to significantly affect our core operations and achievement of strategic objectives	🟡	🟢	🔴	🟡	🟡	🔴	🟡
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	🟡	🟡	🟡	🟡	🟡	🟡	🟡
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	🟡	🟡	🟡	🟡	🟡	🟡	🟡
Uncertainty surrounding the viability of key suppliers, scarcity of supply, or stable supply prices may make it difficult to deliver our products or services at acceptable margins	🟡	🟢	🟡	🟢	🟡	🟡	🟢
The behaviors and personal conduct of the organization's management team and other key representatives may not conform to societal and ethical expectations (new in 2019)	🟡	🟢	🟡	🟢	🟢	🟡	🟢

In stark contrast to 2019, board members and Other C-Suite executives have significantly reduced their level of concern about specific risk issues, as reflected by their ratings of the 30 risks at the highest impact level (red circles). In 2019, board members rated 26 of the 30 risks at the highest level, and Other C-Suite executives rated 25 of the 30 risks as highest impact, while for 2020 these numbers have dropped to six and three, respectively. In fact, among a number of categories the decrease in risks rated at the highest level is significant. CEOs decreased their "Significant Impact" risks from six to one, CIOs/CTOs decreased from 19 to 13, and CROs decreased from eight to four. At the other end of the spectrum, CFOs increased risks at the highest level to eight risks from five risks in 2019. CAEs remained relatively stable with six risks rated "Significant Impact" in 2020, versus five in 2019.

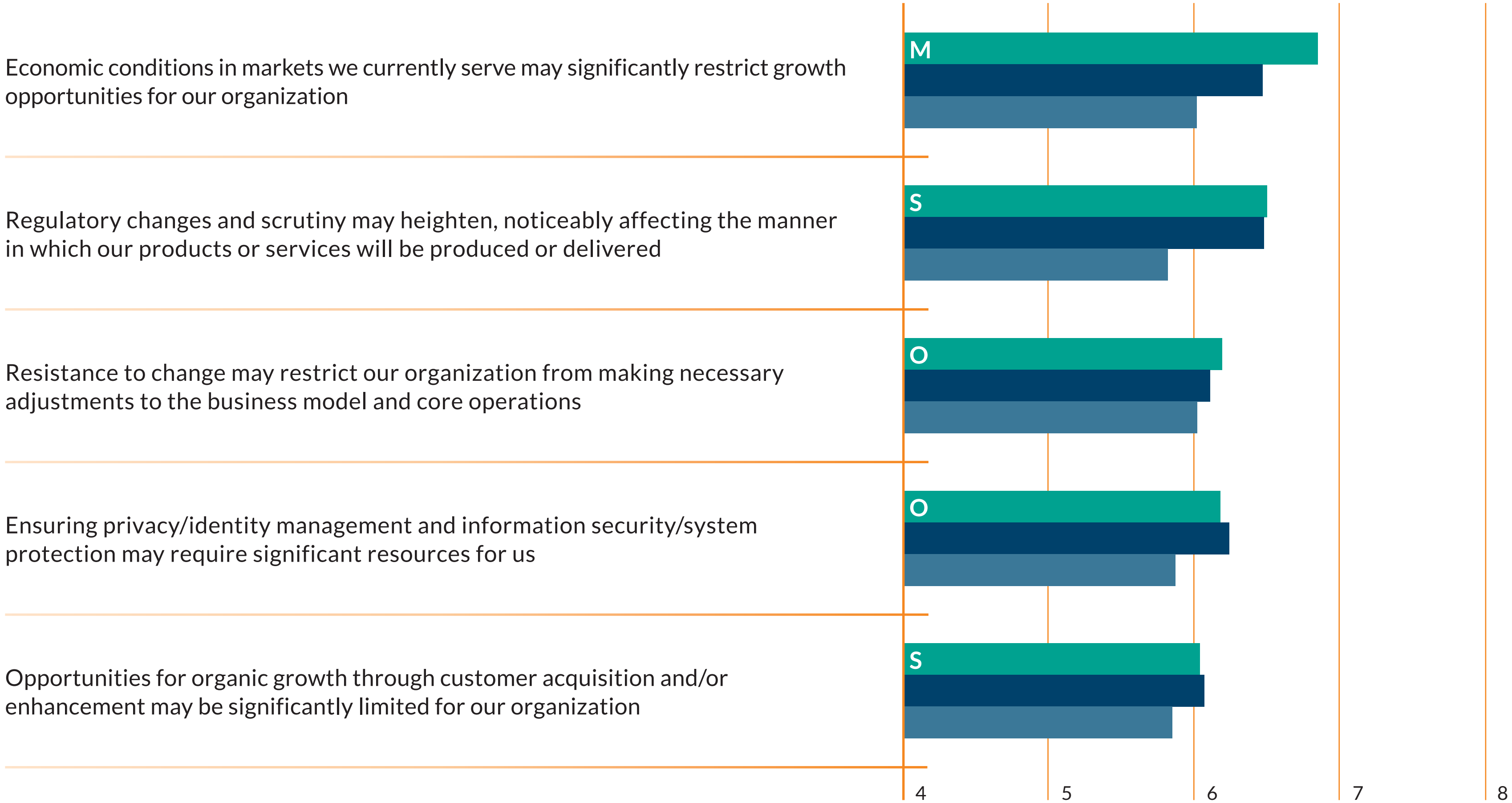
The charts on the following pages highlight the top five risks identified by each position. Of particular note is the observation that four of the top five risks for CEOs relate to macroeconomic risk concerns, which are significantly more than any other position. Board members, CFOs, and CIOs/CTOs identify only one of their top five risks as macroeconomic, while all other positions did not identify any macroeconomic issues as top five risks. On the other hand, CFOs, CROs, CAEs and Other C-Suite executives almost exclusively identify operational issues in their top five risks (three for CFOs and four of five for each of the other categories). In contrast, board members and CIOs/CTOs took a broader view of the risk landscape and have a more evenly distributed top five list this year. This finding is not intended to suggest that these executives are focused solely on day-to-day "blocking and tackling" issues. As noted earlier, these operational matters have strategic implications, as well.

The disparity reflected above may also reflect how different roles assess risks in different environments and economic periods. In 2019, we observed that CEOs and board members took more of a "big picture" view of risks by identifying more macroeconomic and strategic risks in their top five, while other executives focused more on operational issues. In 2020, all except the CEO position appear to be more focused on operational risks. However, as noted earlier, these operational issues have strategic ramifications in terms of resource allocation and other strategic decisions which may be weighing on the minds of the executives rating them highly relative to other risks.

Again, this disparity in viewpoints emphasizes the critical importance of bringing numerous viewpoints to risk discussions. It is of paramount importance that both the board and the management team engage in risk discussions, given the different perspectives each brings to the table and the potential for a lack of consensus about the organization's most significant risks. Without clarity of focus, the executive team may not be aligned with the board on what the top risks are. Worse, they may not be appropriately addressing the most important risks facing the organization, thereby leaving the organization potentially vulnerable to certain risk events.

> "There is a significant contrast in risk perspectives across C-suite positions, which will require discussion and analysis of the factors influencing overall impressions about the risk environment among key leaders, especially at the highest level of the organization."
>
> Don Pagach, Professor of Accounting, Director of Research, Enterprise Risk Management Initiative, Poole College of Management, NC State University

Board Members



Legend

M Macroeconomic Risk Issue S Strategic Risk Issue O Operational Risk Issue 2020 2019 2018

CEOs

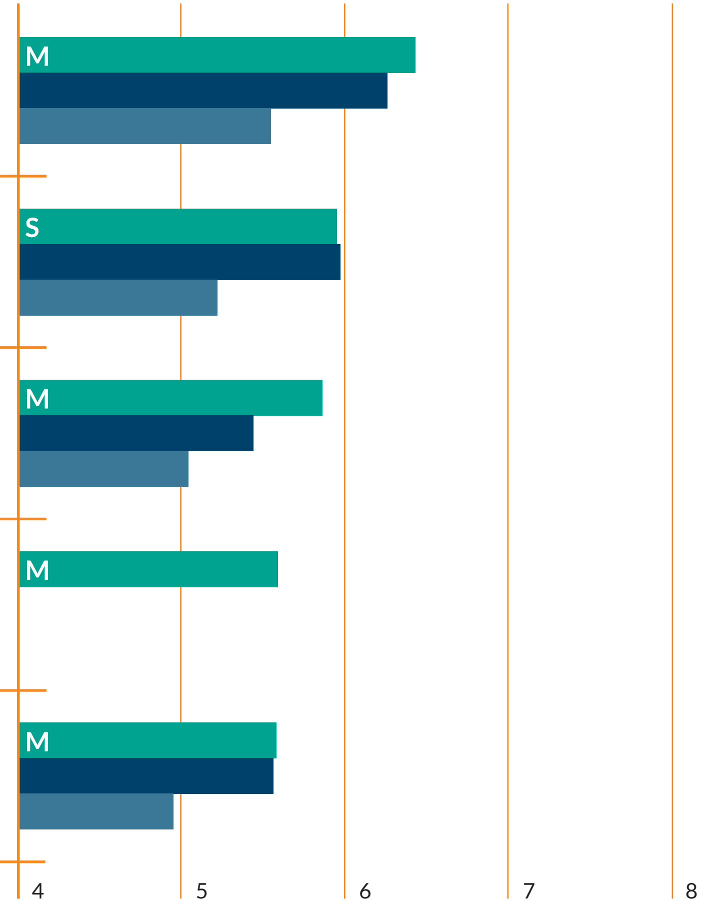
Economic conditions in markets we currently serve may significantly restrict growth opportunities for our organization

Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered

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

The adoption of digital technologies (e.g., artificial intelligence, robotics, natural language processing) in our organization may require new skills that either are in short supply or require significant efforts to upskill and reskill existing employees (new in 2020)

Anticipated increases in labor costs may affect our opportunity to meet profitability targets



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M Macroeconomic Risk Issue   S Strategic Risk Issue   O Operational Risk Issue   2020   2019   2018

CFOs

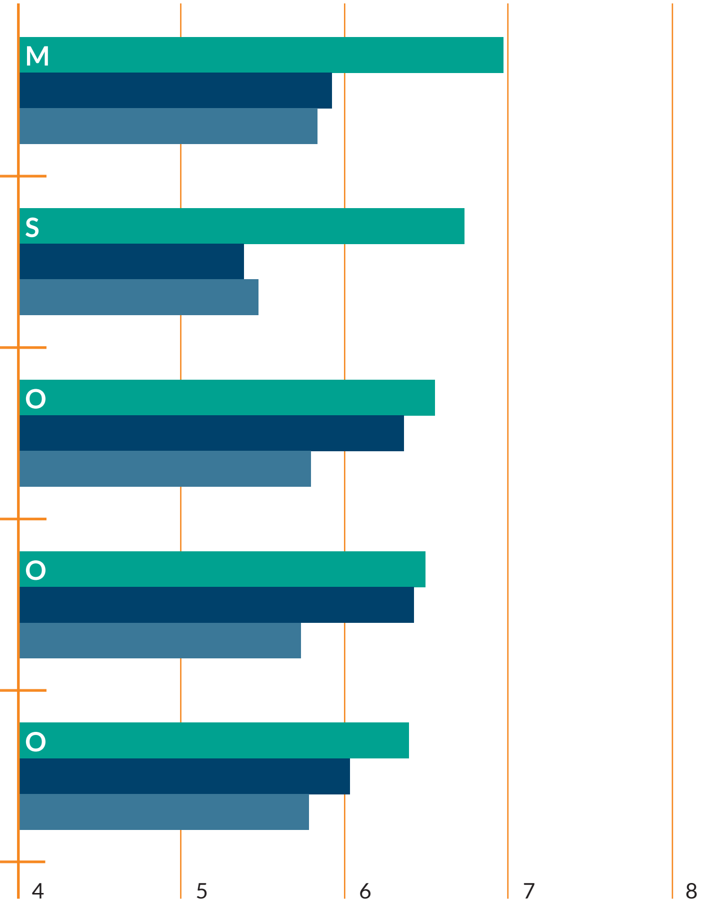
Economic conditions in markets we currently serve may significantly restrict growth opportunities for our organization

Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered

Resistance to change may restrict our organization from making necessary adjustments to the business model and core operations

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 that have the potential to significantly disrupt core operations and/or damage our brand



Legend

M Macroeconomic Risk Issue S Strategic Risk Issue O Operational Risk Issue 2020 2019 2018

TABLE OF CONTENTS

CROs

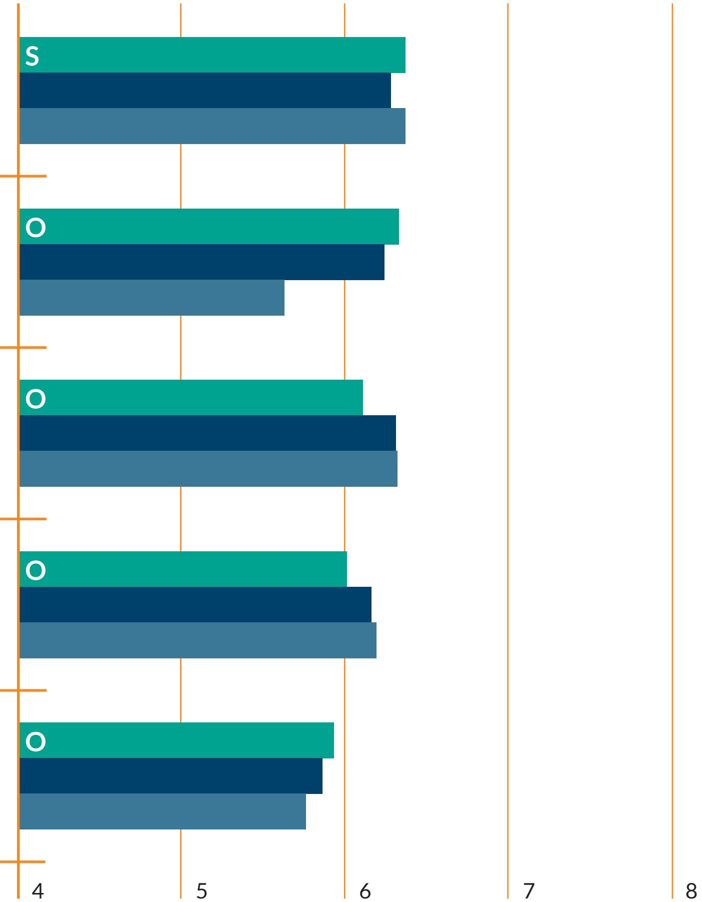
Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered

Our existing operations, legacy IT infrastructure, and insufficient embrace of digital thinking and capabilities may not meet performance expectations related to quality, time to market, cost and innovation as well as our competitors, especially new competitors that are "born digital" and with a low cost base for their operations, or established competitors with superior operations

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

Resistance to change may restrict our organization from making necessary adjustments to the business model and core operations

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



Legend

M Macroeconomic Risk Issue   S Strategic Risk Issue   O Operational Risk Issue   2020   2019   2018

CAEs

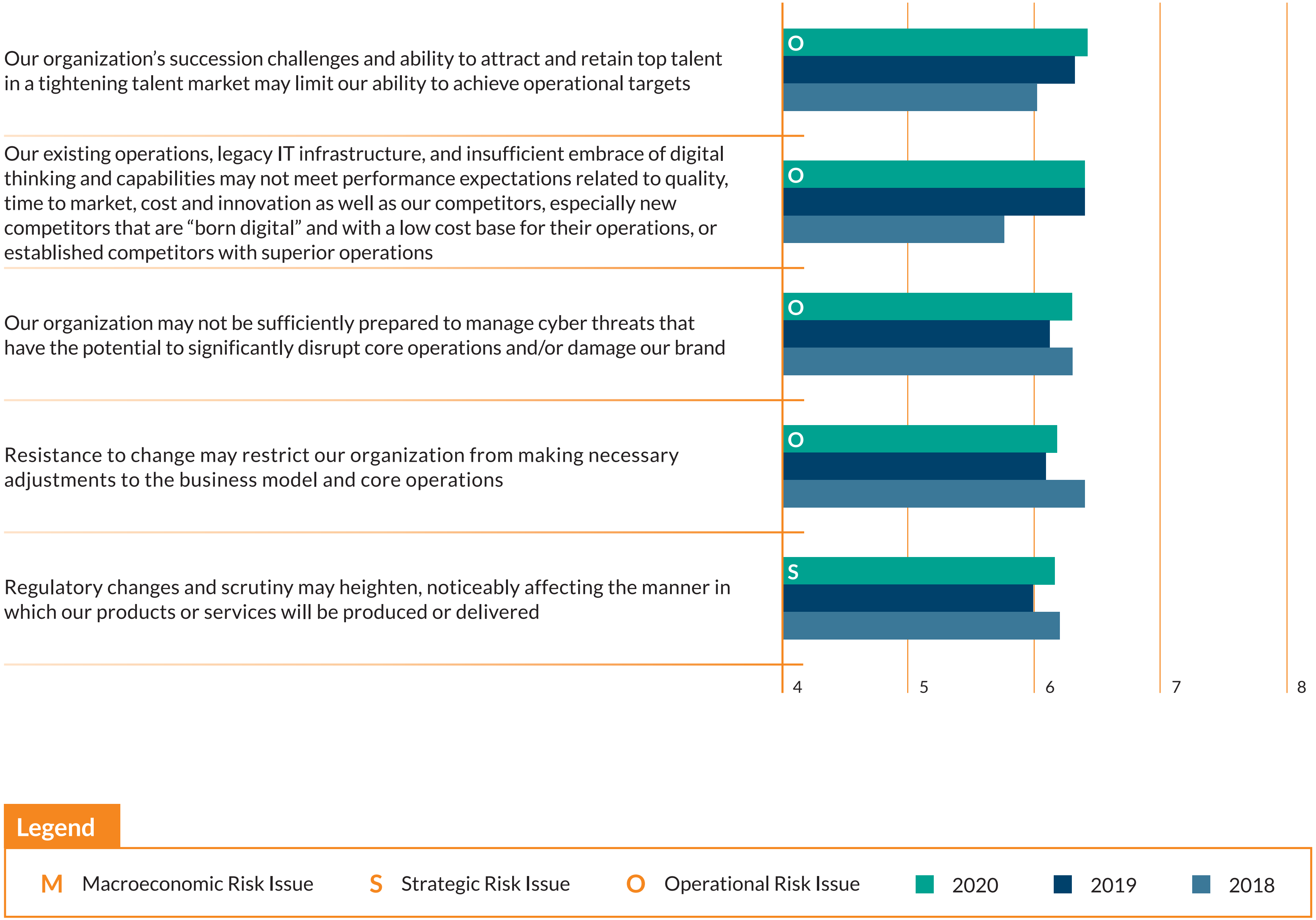
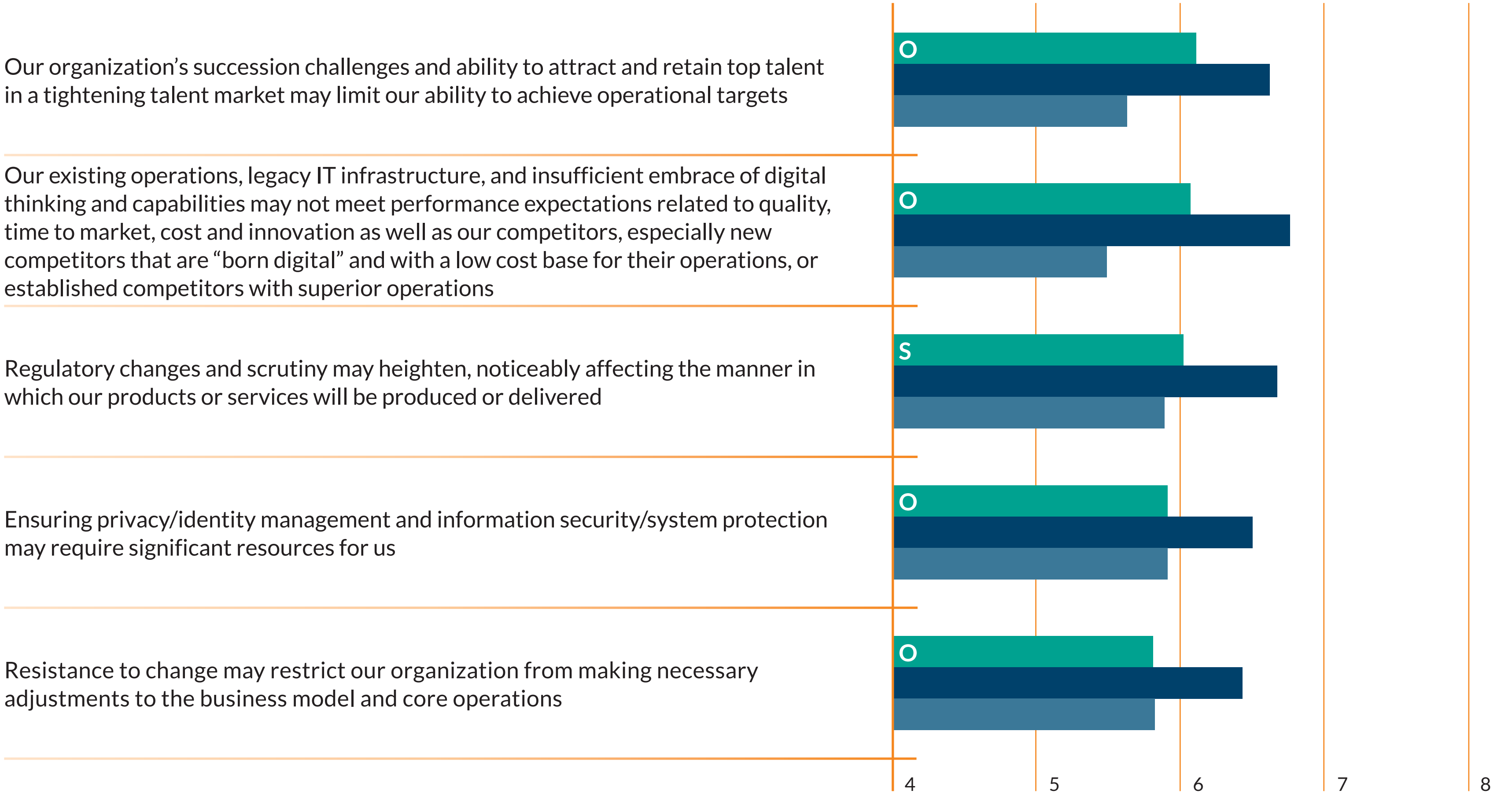

Our organization's succession challenges and ability to attract and retain top talent in a tightening talent market may limit our ability to achieve operational targets
O
Our existing operations, legacy IT infrastructure, and insufficient embrace of digital thinking and capabilities may not meet performance expectations related to quality, time to market, cost and innovation as well as our competitors, especially new competitors that are "born digital" and with a low cost base for their operations, or established competitors with superior operations
O
Our organization may not be sufficiently prepared to manage cyber threats that have the potential to significantly disrupt core operations and/or damage our brand
O
Resistance to change may restrict our organization from making necessary adjustments to the business model and core operations
O
Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered
S
4
5
6
7
8
Legend
M Macroeconomic Risk Issue
S Strategic Risk Issue
O Operational Risk Issue
2020
2019
2018

TABLE OF CONTENTS

CIOs/CTOs

Other C-Suite



Legend

M Macroeconomic Risk Issue   S Strategic Risk Issue   O Operational Risk Issue   2020   2019   2018

Analysis Across Industry Groups

Respondents to our survey represent organizations in a number of industry groupings, as shown below. We analyzed responses across the six industry groups[7] to determine whether industries rank-order risks differently. Similar to our analysis of the full sample and across the different sizes of organizations and types of respondents, we analyzed responses about overall impressions of the magnitude and severity of risks across the above industry grouping categories. Again, the scores in the table below reflect responses to the question about their overall impression of the magnitude and severity of risks their organization will be facing with respect to reaching or exceeding profitability (or funding) targets over the next 12 months, using a 10-point scale where 1 = "Extremely Low" and 10 = "Extremely High."

INDUSTRY	NUMBER OF RESPONDENTS
Financial Services (FS)	320
Consumer Products and Services (CPS)	221
Manufacturing and Distribution (MD)	227
Technology, Media and Telecommunications (TMT)	79
Healthcare (HC)	60
Energy and Utilities (EU)	105
Other industries (not separately reported)	51
Total Number of Respondents	**1,063**

[7] In this year's report, we did classify certain firms into new industry groups when compared to prior years. We felt the new industry group classifications better characterized these firms. We have reclassified firms to reflect these changes for the two prior years reported (2019 and 2018), as well, to preserve comparability with the 2020 results provided in this report. This does mean that certain industry group results in this year's report for 2019 and 2018 data differ from reported results in the reports from those years.

Overall, what is your impression of the magnitude and severity of risks your organization will be facing with respect to reaching or exceeding profitability (or funding) targets over the next 12 months?	2020	2019	2018
Financial Services (FS)	6.2	6.1	5.9
Consumer Products and Services (CPS)	5.8	6.1	5.8
Manufacturing and Distribution (MD)	6.3	6.4	6.2
Technology, Media and Telecommunications (TMT)	6.1	6.2	6.5
Healthcare (HC)	6.5	6.8	6.2
Energy and Utilities (EU)	6.0	6.1	5.7

Respondents from every industry group, with the exception of the Financial Services industry group, perceive that the magnitude and severity of risks affecting their organization will be reduced in 2020, with respect to prior year perceptions. This decrease is most noted in that among the six industry group categories, there were 19 instances in which risks were rated at the lowest level as "Less Significant Impact" across various groups in 2020, as opposed to zero in 2019. In addition, except for Energy and Utilities, each industry group decreased its number of "Significant Impact" risks from 2019 levels. The biggest decrease was for the Healthcare industry group, which saw "Significant Impact" risks decrease from 14 in 2019 to nine in 2020. Even Financial Services, the only industry group to see an increase in its magnitude and severity of risks measure, saw its number of "Significant Impact" risks decrease from 10 in 2019 to seven in 2020.

This overall decrease in concerns mostly results from a decrease in the number of operational risks rated as "Significant Impact." With the exception of Energy and Utilities, every industry group rated fewer operational risks as "Significant Impact" in 2020 as opposed to 2019. Most notably, the Financial Services industry group decreased the number of "Significant Impact" operational risks from six in 2019 to three in 2020. However, readers should be careful in drawing conclusions from the impact category breakdowns, as numerous operational risks have average ratings slightly above 5.9 (i.e., very close to remaining at the "Significant Impact" risk level) and should still continue to be of concern. That may be due to those risks having significant strategic underpinnings, meaning it is a business as well as an urgent strategic imperative to address them. For example, all industry groups rated the operational risk related to the ability to manage cyber threats as a "Significant Impact" risk in 2019, but only three did so in 2020. However, looking at the results, both the Financial Services and Consumer Products and Services industry groups have rated this risk above 5.9 on average. From the standpoint of executing the strategy, preserving market share, and protecting reputation and brand image, it is easy to see why.

Concerns about tariff and trade negotiations continue to weigh heavily on respondents. The Financial Services, Manufacturing and Distribution, and Technology, Media and Telecommunications industry groups saw a significant increase in the risk associated with economic conditions in markets currently served. Somewhat surprisingly, for the Consumer Products and Services and the Energy and Utilities industry groups, this risk stabilized but remains elevated.

All industry groups include the restrictive/disruptive impact of regulatory changes and scrutiny, along with succession challenges and the ability to attract and retain talent, as "Significant Impact" risks. For regulatory concerns, the Financial Services, Healthcare, and Energy and Utilities industry groups list this as their top risk. This should not be surprising with the election season starting in the United States and calls for additional regulatory oversight a component of many presidential candidates' platforms.

Both the Financial Services and Technology, Media and Telecommunications industry groups rate the risk associated with the adoption of digital technologies (AI, robotics, natural language processing) creating different skill and talent needs as having a "Significant Impact." Given the rapid embrace of technologies in these two industry groups, it is no surprise that this risk is of significant concern for them more than other industries.

Respondents in the Healthcare industry group reflect the most volatility in overall risk concerns across the three years. Given technological advancements that continue to occur at a rapid pace as well as significant regulatory uncertainty, this industry group continues to experience significant change relative to the other industry groups.

Interestingly, given the stagnation in energy prices, the Energy and Utilities industry group saw a slight decrease in overall risk concern. While previously there was significant volatility in oil prices and heightened risk levels, there are now more stable energy prices and risks seem to have also stabilized.

In Table 7, we provide an overview of the similarities and differences across industry groups in executive perspectives about each of the 30 risks rated in this study (categorized as macroeconomic, strategic and operational risk issues), as well as highlight risks of primary concern in 2020.

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	🟢

Industry

TABLE 7

MACROECONOMIC RISK ISSUES	FS	CPS	MD	TMT	HC	EU
Economic conditions in markets we currently serve may significantly restrict growth opportunities for our organization	🔴	🟡	🔴	🔴	🟡	🔴
The adoption of digital technologies (e.g., artificial intelligence, robotics, natural language processing) in our organization may require new skills that either are in short supply or require significant efforts to upskill and reskill existing employees (new in 2020)	🔴	🟡	🟡	🔴	🟡	🟡
Unexpected change in the current interest rate environment may have a significant effect on the organization's operations	🔴	🟢	🟡	🟡	🟢	🟡
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	🟡	🟡	🟡	🟡	🟡	🟡
Anticipated increases in labor costs may affect our opportunity to meet profitability targets	🟡	🟡	🟡	🟡	🟡	🟡
Anticipated volatility in global financial markets and currency exchange rates may create significantly challenging issues for our organization to address	🟡	🟡	🟡	🟡	🟢	🟡
Evolving changes in global trade policies may limit our ability to operate effectively and efficiently in international markets	🟡	🟡	🟡	🟡	🟢	🟡
Our ability to access sufficient capital/liquidity may restrict growth opportunities for our organization	🟡	🟢	🟡	🟡	🟢	🟡
Geopolitical shifts and instability in governmental regimes or expansion of global terrorism may restrict the achievement of our global growth and profitability objectives	🟢	🟢	🟡	🟡	🟢	🟡

TABLE 7 (CONTINUED)

STRATEGIC RISK ISSUES	FS	CPS	MD	TMT	HC	EU
Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered	🔴	🔴	🔴	🔴	🔴	🔴
Sustaining customer loyalty and retention may be increasingly difficult due to evolving customer preferences and/or demographic shifts in our existing customer base	🟡	🟡	🟡	🟡	🔴	🟡
Rapid speed of disruptive innovations enabled by new and emerging technologies (e.g., artificial intelligence, robotics, machine learning, hyperscalable platforms) 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	🟡	🟡	🟡	🟡	🟡	🟡
Social media, mobile applications and other Internet-based applications may significantly impact our brand, customer relationships, regulatory compliance processes and/or how we do business	🟡	🟡	🟡	🟡	🟡	🟡
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 prepared to manage an unexpected crisis significantly impacting our reputation	🟡	🟡	🟡	🟡	🟡	🟡
Growth 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	🟡	🟡	🟡	🟡	🟡	🟡

TABLE 7 (CONTINUED)

STRATEGIC RISK ISSUES (CONTINUED)	FS	CPS	MD	TMT	HC	EU
Substitute products and services may arise that affect the viability of our current business model and planned strategic initiatives	🟡	🟡	🟡	🟡	🟡	🟡
Shifts in environmental, social and governance (ESG) preferences as well as expectations of key stakeholders about climate change, diversity and inclusion, and other sustainability issues may be difficult for us to identify and address on a timely basis	🟡	🟡	🟡	🟡	🟢	🟡
Performance vulnerabilities may trigger shareholder activism against our organization that may significantly impact our organization's strategic plan and vision	🟢	🟡	🟡	🟡	🟢	🟡

OPERATIONAL RISK ISSUES	FS	CPS	MD	TMT	HC	EU
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 existing operations, legacy IT infrastructure, and insufficient embrace of digital thinking and capabilities may not meet performance expectations related to quality, time to market, cost and innovation as well as our competitors, especially new competitors that are "born digital" and with a low cost base for their operations, or established competitors with superior operations	🔴	🔴	🔴	🟡	🔴	🔴
Resistance to change may restrict our organization from making necessary adjustments to the business model and core operations	🟡	🟡	🔴	🔴	🔴	🔴
Ensuring privacy/identity management and information security/system protection may require significant resources for us	🔴	🟡	🟡	🔴	🔴	🟡

TABLE 7 (CONTINUED)

OPERATIONAL RISK ISSUES (CONTINUED)	FS	CPS	MD	TMT	HC	EU
Our organization may not be sufficiently prepared to manage cyber threats that have the potential to significantly disrupt core operations and/or damage our brand	🟡	🟡	🔴	🟡	🔴	🔴
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	🟡	🟡	🟡	🟡	🔴	🟡
Our organization's culture may not sufficiently encourage the timely identification and escalation of risk issues that have the potential to significantly affect our core operations and achievement of strategic objectives	🟡	🟡	🟡	🟡	🔴	🟡
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	🟡	🟡	🟡	🟡	🟡	🟡
Uncertainty surrounding the viability of key suppliers, scarcity of supply, or stable supply prices may make it difficult to deliver our products or services at acceptable margins	🟢	🟡	🟡	🟡	🟡	🟡
The behaviors and personal conduct of the organization's management team and other key representatives may not conform to societal and ethical expectations (new in 2019)	🟢	🟢	🟢	🟢	🟢	🟢

For 2020, operational risks related to concerns about succession challenges and the ability to attract and retain talent made the top five list of risks for each of the industry groups examined, except for Financial Services. In addition, concerns about existing operations, legacy IT systems and digital capabilities is rated "Significant Impact" by all industry groups with the exception of Technology, Media and Telecommunications, which still gave this risk an average rating of 5.97.

All industry groups also rate very highly concerns that the organization's resistance to change may restrict companies from making necessary adjustments to their business models. Financial Services and Consumer Products and Services each rate this risk above 5.94, while the other four industry groups rate it as "Significant Impact."

Examining macroeconomic risks more closely, the Financial Services industry group has the most risks rated "Significant Impact." Overall, four of the six industry groups rate the macroeconomic risk related to economic conditions in markets they currently serve as "Significant Impact" for 2020. In addition, the Manufacturing and Distribution and Technology, Media and Telecommunications industry groups have this concern as their highest-rated risk.

At the strategic risk level, we see more consistency among the industry groups, with all industry groups rating regulatory risk and its effect on operational resilience, products and services as "Significant Impact." However, one change clearly stands out for 2020 — the decreased concern over the risk that sustaining customer loyalty and retention may be difficult due to evolving customer preferences. In 2020, only the Healthcare industry group views this as a "Significant Impact" risk, whereas in 2019 the Financial Services, Consumer Products and Services, and Technology, Media and Telecommunications industry groups also rated it as a "Significant Impact" risk.

> "As in prior years, the risk profile we present for each of the six industry groups we track reflects issues unique to that group. Regulatory matters and the war for talent are significant risk issues for all six industry groups. Economic conditions, the effects of disruptive digital technologies, cyber threats, privacy exposures and resistance to change are pervasive concerns to several industry groups."
>
> Pat Scott, Executive Vice President, Global Industry Program, Protiviti

The Healthcare industry group has the highest level of risk concerns. Respondents in that industry group identified nine of the 30 risks as "Significant Impact" risks, with seven of those being operational risks. The only industry group that rated more risks as "Significant Impact" in 2020 versus 2019 is Energy and Utilities.

The bar charts on the following pages report the top five risk exposures in rank order for each of the six industry groups. The 2020 results are presented in green. Recall that a risk with an average score of 6.0 or higher is considered a "Significant Impact" risk, while risks with average scores between 4.5 and 5.99 are "Potential Impact" risks and risks with average scores below 4.5 are "Less Significant Impact" risks. In addition, the bar charts provide the risk rating for the previous two years, with 2019 in dark blue and 2018 in light blue.

One noticeable observation from these charts is that each industry group, with the exception of Consumer Products and Services, rated all of their top five risks as "Significant Impact" risks for 2020. The Consumer Products and Services industry group rated three of its risks as

"Significant Impact," while the other two had an average of 5.9. Surprisingly, although respondents in almost every industry group have the overall impression that the magnitude and severity of risks is lower in 2020 relative to 2019 and 2018, respondents also generally rate their top five risk concerns as higher in 2020 relative to 2019, as reflected by the bar graphs on the pages that follow. The decrease in the overall impression of the magnitude and severity of risks in 2020 is driven primarily by an increase in the number of risks rated as "Less Significant Impact."

In 2020, with the exception of the Healthcare industry group that rated one of its risks with an average score that exceeds 7.0 on our 10-point scale, no other industry group rated any of the top 30 risks that high. There are also differences in categories for the top five risks across the six industry groups examined. The Financial Services, Consumer Products and Services, Manufacturing and Distribution, and Technology, Media and Telecommunications industry groups each have at least one macroeconomic risk in their top five risk concerns. The Manufacturing and Distribution industry group was the only group that did not include a strategic risk among their top five. The Manufacturing and Distribution, Healthcare, and Energy and Utilities industry groups are most concerned with operational risks, given four of their top five risk concerns are in that category. In contrast, the Financial Services and Technology, Media and Telecommunications industry groups rank two operational risks among their top five risk concerns.

These noted differences in risk issues across the different industry groups highlight the importance of understanding industry drivers and emerging developments in order to identify the most significant enterprise risks and emerging risk concerns in each industry. Following each bar chart by industry group, we provide additional commentary about industry-specific risk drivers.

Financial Services

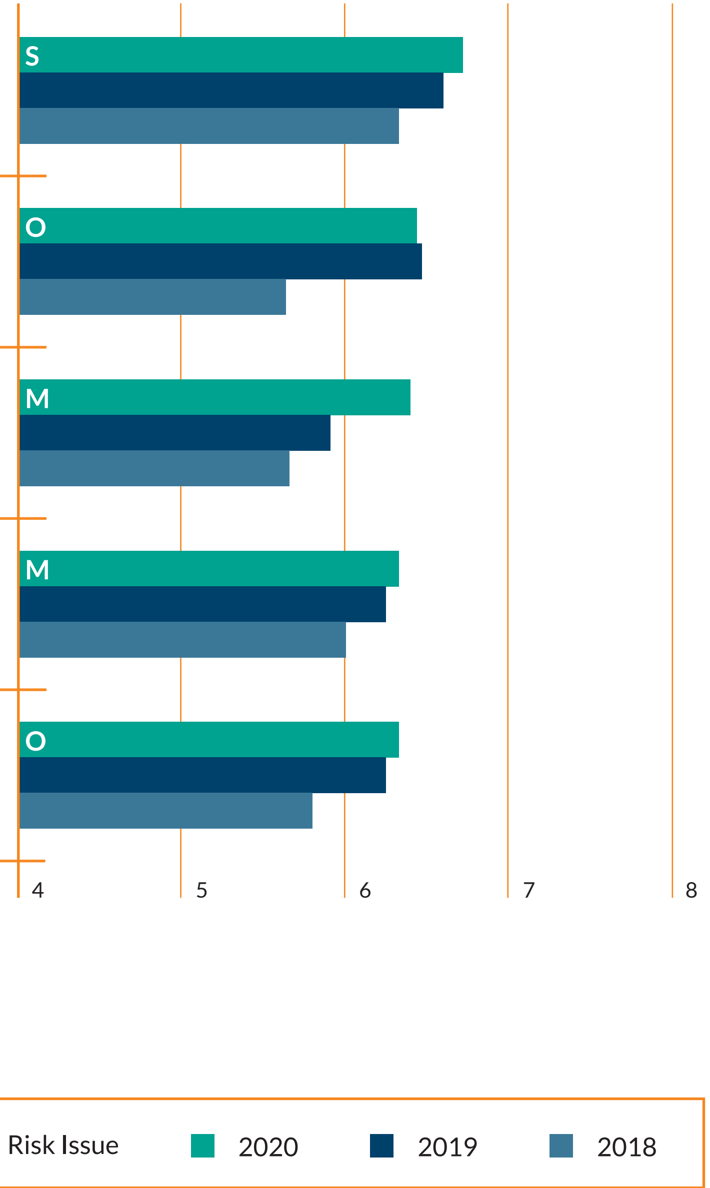
Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered

Our existing operations, legacy IT infrastructure, and insufficient embrace of digital thinking and capabilities may not meet performance expectations related to quality, time to market, cost and innovation as well as our competitors, especially new competitors that are "born digital" and with a low cost base for their operations, or established competitors with superior operations

Economic conditions in markets we currently serve may significantly restrict growth opportunities for our organization

Unexpected change in the current interest rate environment may have a significant effect on the organization's operations

Ensuring privacy/identity management and information security/system protection may require significant resources for us



Commentary — Financial Services Industry Group

For many years coming out of the global economic crisis that began in 2008, our Top Risks survey results showed that financial services firms were focused almost exclusively on risk management and regulatory compliance matters. This trend began to shift in 2018 and 2019 when, although compliance topics continued to be considered a top source of risk, there were similar levels of concerns about keeping pace with the need for digital innovations and fending off disruptive competition from "born digital" fintech competitors.

Our 2020 results represent another change in emphasis. Regulatory compliance concerns are ranked as the top risk yet again, as they have been for the industry in all eight years of our study. The score for this attribute has actually increased, albeit only slightly, for 2020. Likewise, the threat of digital disruption remains the second highest risk, although the score for this attribute marginally decreased year over year.[8] Conversely, there is a significant increase in the perceived risks that softening global economic conditions pose to financial institutions. The two risk topics with the largest increases from 2019 to 2020, which are related, are:

- "Economic conditions in markets we currently serve may significantly restrict growth opportunities for our organization" — This attribute is the third highest-ranked risk area for 2020 and reflects a year-over-year change of more than 10 times the increase in the perception of regulatory risk.
- "Unexpected change in the current interest rate environment may have a significant effect on the organization's operations" — This topic moved to fourth place on the list of top risks and showed the second largest year-over-year change after the previously noted risk concerning economic conditions.

> "Regulatory compliance risks and the threat of change have topped the list of industry risks since the inception of our study. Over the last decade, financial services organizations have been responding to heightened levels of regulatory expectations and actions worldwide, but many are now shifting more of their attention toward automation and other digital solutions such as AI and machine learning to increase the efficiency of their risk and compliance programs. But still, worldwide, the threat of regulatory change remains, even though the level of risk is not the same in every market. On the digital front, we're moving from an environment in which the threat of digital disruption was a poorly understood and uncertain risk, to one in which financial services institutions are starting to see their investments pay off. Digital initiatives are transitioning from proof of concept to practical functioning applications that are benefiting both clients and internal stakeholders. And more productive partnerships are being formed between traditional financial services firms and fintech organizations that up until now have been viewed almost exclusively as high-threat competitors."
>
> Michael Brauneis, Managing Director, Americas Financial Services Industry Leader, Protiviti

[8] Presented as "Our existing operations, legacy IT infrastructure, and insufficient embrace of digital thinking and capabilities may not meet performance expectations related to quality, time to market, cost and innovation as well as our competitors, especially new competitors that are 'born digital' and with a low cost base for their operations, or established competitors with superior operations."

Assessing the Regulatory Environment

The perceived level of regulatory risk remains at a somewhat surprisingly high level. We believe there are several explanations for this, including:

1. In the United States, the regulatory pendulum in the financial services industry has swung back to a somewhat more normal state as compared to an extremely high level of enforcement activity immediately after the financial crisis, followed by a deregulatory push in the early years of the Trump administration. This was coupled with more business-friendly leaders named to head many of the major U.S. federal regulatory agencies starting in 2017. These efforts had largely moderated by the end of 2019, and we've begun to see higher levels of enforcement activity at agencies such as the Consumer Financial Protection Bureau.[9] This dynamic likely explains some of the uptick in the assessment of this risk.
2. Looking ahead, financial institutions are assessing the potential impact on their industry if a Democratic candidate wins the upcoming November 2020 U.S. presidential election. Multiple leading candidates on that side of the aisle have established policy platforms that would impose significant additional regulatory costs and restrictions on financial services firms.[10]
3. Around the world, a variety of regulatory topics combine to account for an overall level of increased risk in this area. These include:
   - Heightened focus on conduct risk, particularly in Europe and Asia-Pacific.
   - Increasing lawmaker and regulatory agency engagement in – and the possibility of tighter regulatory requirements related to – fintech and other financial services innovation efforts. In the United States, for example, there is great debate over efforts by Facebook to establish its own cryptocurrency, Libra.[11] Of note, outside the United States, the environment for fintech is much more hospitable.
   - New regulatory requirements and/or increasing examination scrutiny related to anti-money laundering and financial crimes laws, for example, in Australia, Japan and Canada.
   - Amid growing expectations for a global economic downturn, regulators in all markets are increasing their scrutiny of credit quality and safety and soundness matters more generally.
4. Globally, we expect to see more privacy-related laws and regulations implemented that will give consumers greater control over how their personal data is used by the companies with which they do business. Although the financial services industry continues to lobby to be carved out of possible future privacy standards in light of existing industry-specific mandates (such as the Gramm-Leach-Bliley Act in the United States), we think it is very unlikely that financial institutions will escape additional regulation in this area altogether.

Digital Disruption Still a Key Risk, but Confidence in This Area Is Increasing

Concerns about responding effectively to the threat of digital disruption remain elevated but decreased slightly from our 2019 results. This tracks well with what we see day-to-day working with our clients. Innovation investments continue to accelerate, and financial services executives are gaining confidence in their ability to distinguish hype from reality and focus these investments on the areas that will provide the greatest returns. In several key areas such as intelligent process automation, machine learning (ML), and AI/ML, these efforts have moved well beyond the proof of concept stage and are being used in production

[9] www.americanbanker.com/news/led-by-trump-appointee-cfpb-is-back-in-the-enforcement-business.

[10] See, for example, Elizabeth Warren's proposal (https://elizabethwarren.com/plans/wall-street) and Bernie Sanders' proposal (https://berniesanders.com/issues/real-wall-street-reform/).

[11] www.nytimes.com/2019/10/23/technology/facebook-zuckerberg-libra-congress.html.

environments to significantly transform key business processes. Examples include applying intelligent process automation to customer service processes, as well as in the use of AI/ML to make fraud, anti-financial crime processes and credit underwriting processes more accurate and dramatically more efficient.

Additionally, chief data officer roles continue to proliferate. Leading organizations have recognized that intelligent automation, AI and ML investments can only be capitalized upon when they can be fed seamlessly by comprehensive and accurate data. In turn, this is leading to ongoing efforts to modernize core systems, consolidate data storage platforms and increasingly move to cloud computing environments.

Regarding fintech competition, concerns about the threat of disruption remain high but are balanced by an increasing recognition of the opportunities for established financial services firms to work effectively in partnerships with startups as well as FAANG-category firms. The recent announcement that Google will partner with Citigroup and the Stanford Federal Credit Union to offer digital checking accounts is one prominent example of this trend.[12] Another example is the investments made by the Mizuho Financial Group and the Sumitomo Mitsui Banking Corporation Group in bitFlyer, Japan's largest cryptocurrency exchange.

Increasing Concern Over Global Economic Conditions

The risk factors that saw the largest year-over-year increase in our 2020 Top Risks Survey relate to the possibility of deteriorating economic conditions as well as the interest rate environment. In the United States and across much of the world, financial institutions are closely monitoring a wide variety of growing risks, including:

1. The impact of the ongoing trade war on their client base and quality of their credit portfolios, particularly those institutions with heavy concentrations in the manufacturing and agricultural industries.
2. The weakening of the economy in China, which has widespread implications for financial services institutions throughout Asia.
3. The fact that both corporate[13] and government debt[14] within the United States are currently at all-time highs.
4. The still uncertain outcome of Brexit negotiations on the UK and European markets, as well as overall slowing of the economy in Europe, and the impact these issues will have on financial services globally.
5. The interest rate environment in most major markets around the world continues to put margin pressure on financial institutions. Bank of America recently estimated that approximately $16 trillion in debt instruments — an estimated one quarter of the total global debt market — is yielding negative interest rates. The European Central Bank and three other European countries, plus Japan, are operating at negative interest rates.[15] Germany recently issued its first-ever 30-year zero coupon bond. Thus far, the United States has avoided negative interest rates, despite vocal urging to the contrary by President Trump directed at the Federal Reserve due to his view that this policy would

12 www.wsj.com/articles/next-in-googles-quest-for-consumer-dominancebanking-11573644601.

13 www.washingtonpost.com/business/economy/corporate-debt-nears-a-record-10-trillion-and-borrowing-binge-poses-new-risks/2019/11/29/1f86ba3e-114b-11ea-bf62-eadd5d11f559_story.html.

14 https://thehill.com/policy/finance/468600-us-debt-surpasses-23-trillion-for-first-time.

15 https://markets.businessinsider.com/news/stocks/negative-interest-rates-explained-what-they-are-why-they-matter-2019-8-1028516867.

spur economic growth. Nevertheless, the Fed did reverse course on interest rates in 2019; after steadily raising the benchmark Fed Funds rate from its all-time low of 0.25% (in place from the end of 2008 until the end of 2015) to 2.5% by the end of 2018, 2019 saw three rounds of rate cuts, ultimately falling back to 1.75% as of October.[16]

These factors have led to a significant degree of uncertainty and a cautious outlook on growth for most financial institution executives. The pressure to continue to invest in technology remains unrelenting. Asset growth is slow after a decade of consistent expansion and a saturated lending environment. With increasing expectations that the economic cycle is starting to turn, executives are reluctant to spur growth by cutting underwriting standards and take on increased default risk as the economy softens.

What might this mean for 2020?

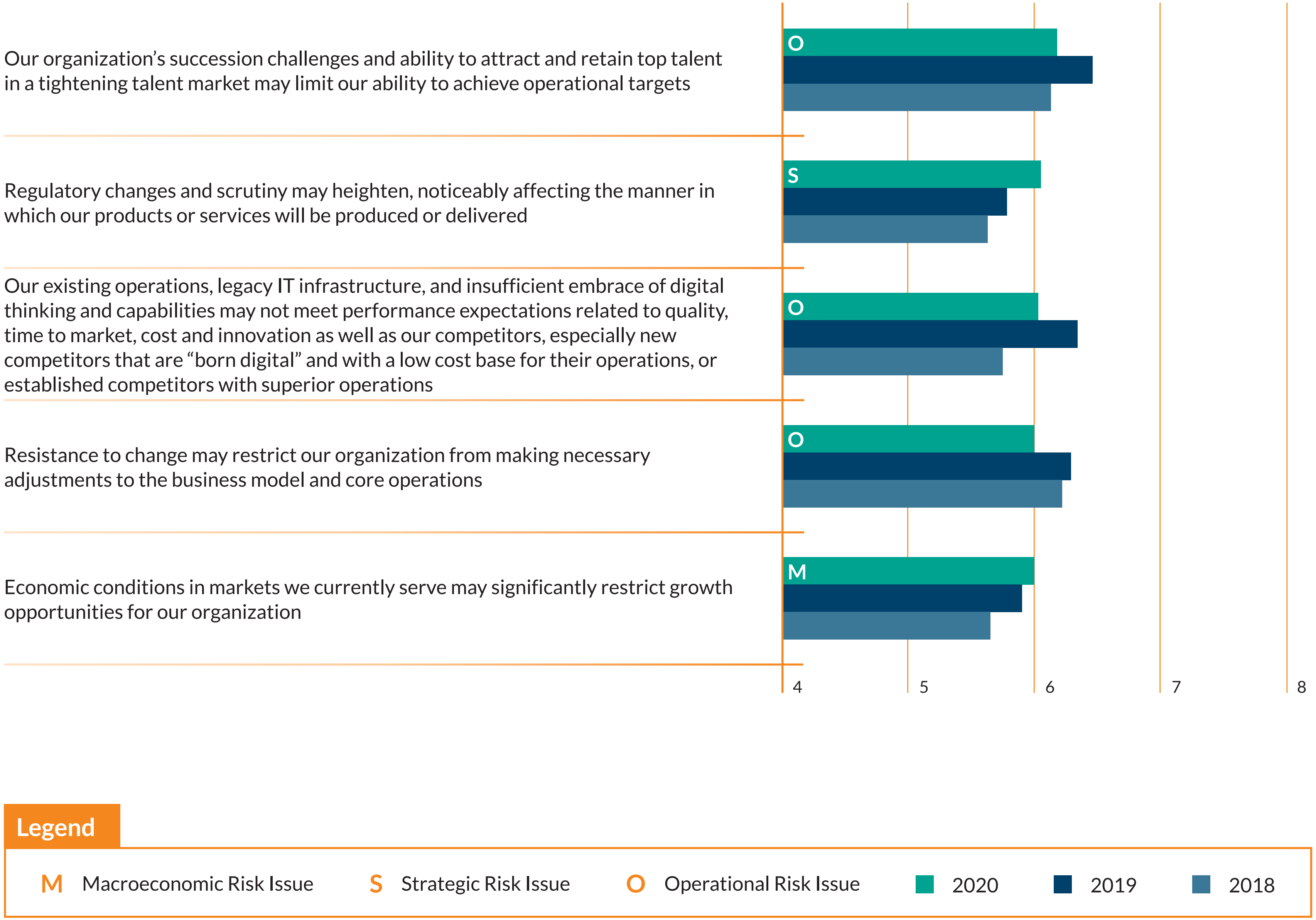
1. Technology investment levels will be preserved, but CEOs and CFOs increasingly will scrutinize proposals and establish more objective and challenging hurdles regarding the extent to which the investments will generate short-term revenue increases or cost savings. "Bells and whistles" enhancements will be cut back.

2. Cost-cutting initiatives generally will accelerate. More aggressive efforts will be made to replace payroll costs with automation and/or outsourced non-core functions. In particular, risk and compliance-focused headcount across the three lines of defense has grown substantially for most financial institutions in the decade since the financial crisis. Although firms remain highly focused on preserving the effectiveness of current compliance activities, as indicated by the threat of regulation representing the top risk issue for the industry, look for executives in these areas to face growing pressure to increase efficiency and better leverage technology investments.

3. Finally, investments in new product offerings are likely to be scaled back or paused. Look for firms to increasingly wind down or seek to divest lines of business and assets that are either not considered core to the company's future strategy, and/or would be particularly exposed in an economic downturn.

[16] www.federalreserve.gov/monetarypolicy/openmarket.html.

Consumer Products and Services



Commentary — Consumer Products and Services Industry Group

Within the Consumer Products and Services industry group, which includes a broad range of organizations – retail, hospitality, hotels, casinos, airlines, professional services, and more – challenges and risk issues understandably vary. In one sense, the risk environment for these organizations does not appear to have changed much, with three of the top five risk issues for 2020 mirroring those in the prior year of our study. Yet in another sense, significant changes are occurring in the industry group that carry with them long-term effects, making it vital for these organizations to bring in and retain talent with the experience and skillsets to respond in an agile manner. This underscores the ranking of succession challenges and the ability to attract and retain top talent as the top risk for consumer products and services organizations.

The changes are widespread. First and foremost, consumers and customers are changing, with their demographics shifting substantially. Not only is there greater demand for more digital services and offerings, but there are different interests and needs among different audience groups and generations, making market segmentation an imperative. In this environment, customer loyalty has become a valuable and increasingly difficult commodity to obtain and, perhaps more importantly, retain. More than ever, consumer products and services organizations need to understand these shifting demographics, what their customers are doing and thinking, and how to tap into their interests.

One essential and proven way for these organizations to tap into the needs of their customers is through data aggregation and analytics to gain a deeper, quantifiable view of consumer preferences. With regard to attracting top talent in a tightening labor market, recruiting professionals with data science and analytics expertise has become a top priority for these organizations.

Other important areas of focus tied to recruiting and retention, not to mention talent management and training, are innovation and developing new ways of bringing products and services to the market. Organizations in the Consumer Products and Services industry group remain concerned with competing against "born digital" organizations, especially considering that legacy IT infrastructures and an insufficient embrace of digital thinking and capabilities are still embedded within many consumer products, retail, hotels, hospitality and other services organizations. While these issues present many opportunities, chief among them may be avoiding shortcomings in meeting the changing demands of consumers and delivering an exceptional customer experience. As we've noted, this audience increasingly expects agile, reliable and real-time service on multiple fronts, from online to in-person. Competitors considered to be "born digital" are delivering these capabilities consistently, often delighting their customer base. As we have seen increasingly in the consumer products and retail sectors, organizations that fail to reach these new "digital" standards face a real threat of significant loss of market share and even extinction.

Yet the need for innovation and transformation is not limited to customer-focused initiatives. Innovation is a growing priority, for example, in areas such as implementing digitalization to automate the supply chain and establishing stronger connections to third parties. Innovation also must extend into product development and even the materials that go into different goods. To illustrate, more consumers are focused on sustainability and seeking reductions in the use of plastics; therefore, numerous consumer products companies are exploring innovative new ways to do things differently so that they can continue delivering their products while reducing environmental impacts. Furthermore, regulatory changes (another top five risk) can affect product innovation when considering issues such as what materials can go into goods and how those goods ultimately are disposed of at the end of their useful lives.

These issues also underscore the risk concern regarding resistance to change restricting the organization from making necessary changes to the business model and core operations. To reiterate, from customer experience to product development to sustainability, it is critical for consumer products and services organizations to innovate and think differently. Those that do not embrace innovation will almost certainly fall behind the competition and face potentially significant disruption to the viability of their business.

Of particular note, many organizations, including those in the Consumer Products and Services industry group, consider change to be primarily about technology, focusing on digitalization of products, services and customer experience. These all are important, but it also is vital to address the people side of change to minimize resistance and develop a culture of innovation down into the core of the organization. Successful companies think and act digitally at the core.

Regulatory changes and scrutiny not only are a top risk for the industry group, but also one where the score increased significantly from 2019, making this a "Significant Impact" risk issue for 2020. This is understandable given the current dynamic environment with regard to trade policies worldwide, which are having a major effect on consumer products organizations and their bottom lines. In addition, there are ongoing concerns about potential taxation in the so-called e-retail space. This is certainly a more prominent challenge given the inroads that organizations beyond the major online retail companies are striving to make in Internet-based commerce to remain competitive and viable over the long term. Increased taxes tied to online transactions represent a potentially significant impediment in these efforts.

Economic conditions round out the top five risks for the industry group. This comes as no surprise, as a broad range of issues, from changing global trade policies to growing volatility in financial and credit markets worldwide, are creating a climate of uncertainty in many global economies. These issues have direct effects on consumer products and services organizations, which obviously rely on consumer buying patterns to drive their businesses.

> "Consumer products and services companies have always had to adapt to the shifting sands of customer preferences, but digital age realities have made brand loyalty illusive and more challenging to retain. Now more than ever, these companies must be innovative as they source talent, stay informed as to customer wants, enhance the customer experience and preserve margins, all the while being responsive to evolving sustainability and wellness trends."
>
> Carol Raimo, Managing Director, Consumer Products and Services Industry Leader, Protiviti

Manufacturing and Distribution

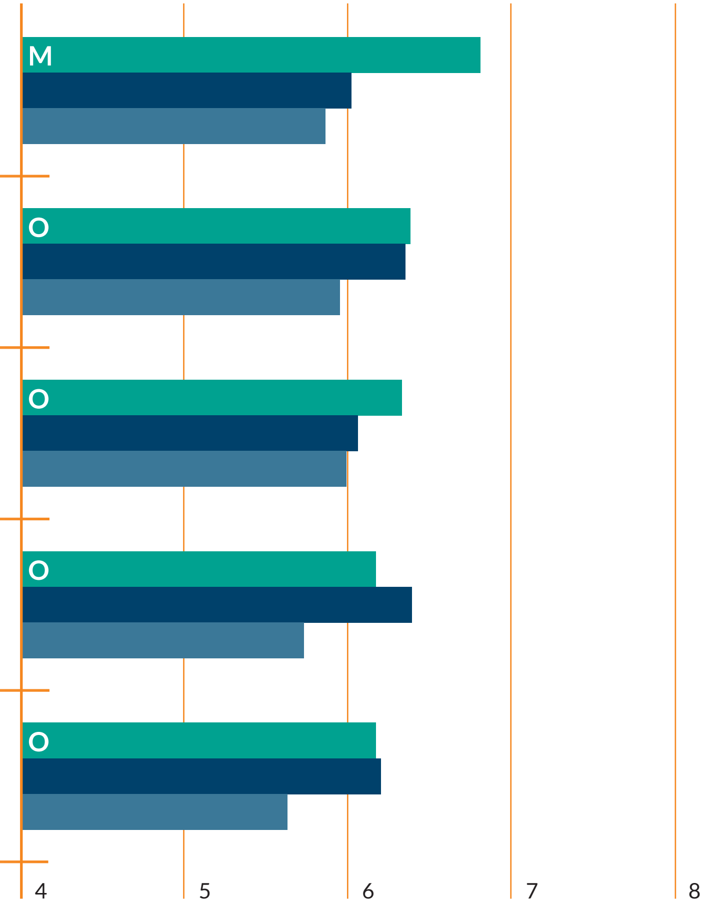
Economic conditions in markets we currently serve may significantly restrict growth opportunities for our organization

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

Resistance to change may restrict our organization from making necessary adjustments to the business model and core operations

Our existing operations, legacy IT infrastructure, and insufficient embrace of digital thinking and capabilities may not meet performance expectations related to quality, time to market, cost and innovation as well as our competitors, especially new competitors that are "born digital" and with a low cost base for their operations, or established competitors with superior operations

Our organization may not be sufficiently prepared to manage cyber threats that have the potential to significantly disrupt core operations and/or damage our brand



Legend

M Macroeconomic Risk Issue | S Strategic Risk Issue | O Operational Risk Issue | 2020 | 2019 | 2018

Commentary — Manufacturing and Distribution Industry Group

For organizations in the Manufacturing and Distribution industry group, concerns and/or uncertainty regarding economic conditions represent the top risk issue by a substantial margin. As seen in our results, risk scores for this issue have climbed over the past three years but jumped notably for 2020. Of note, it also represents the top risk issue for the industry group in all regions except Africa.

While market conditions have been favorable for manufacturing companies over the past two years, there are ongoing concerns that corrections in the market are coming. Leading indicators for the industry, including the Purchasing Managers' Index, have shown signs of possible slowdowns, but these have been inconsistent, with upward trends in the latter half of 2019. Bottom line: There remains significant perceived uncertainty in the global economy, and manufacturing and distribution organizations clearly reflect this in their assessment of this risk issue for the next 12 months.

Succession challenges and the ability to attract and retain top talent are the second-ranked risk this year, compared to the top risk for the industry group in our 2019 study, but its risk score actually increased slightly for 2020. This reflects continued challenges these organizations face in bringing in and retaining the best people, which are compounded by a consistently low level of unemployment in most markets worldwide. Underlying factors include the location of manufacturing plants around the world compared with the availability of the requisite skills in those markets, not to mention evolving skill requirements as manufacturing and distribution companies continue their digital transformation initiatives.

Interestingly, one of the top risk issues from our 2019 study, anticipated increases in labor costs impacting profitability, did not make the top 10 list of risk issues for the industry group in 2020. While it may be that these organizations have adjusted to the reality of this risk, it also is possible that these challenges are superseded by other people-related issues, such as the ability to attract and retain talent, along with resistance to change.

Coming in third on this year's list, manufacturing and distribution organizations remain significantly concerned with resistance to change in the organization potentially restricting it from making necessary adjustments to its business model and core operations. Similar to economic conditions, the risk score for resistance to change has jumped

> "It has been a very good economy for the manufacturing sector over the past few years. But with continued talk about a market correction being long overdue, board members and executives are adopting a longer-term view by focusing more on indicators for when a contraction might occur and how that might impact the overall economy. With regard to succession challenges and the ability to attract and retain top talent, two issues are driving these concerns. One is the availability of talent and skills in their markets, considering where manufacturing sites tend to be located. The second is evolving needs for skills and talent as manufacturing and distribution organizations continue to transition to digital operating environments."
>
> Sharon Lindstrom, Managing Director, Manufacturing and Distribution Industry Leader, Protiviti

notably for 2020 and, unlike the prior year, now represents a top five risk issue for the industry group. With the advent of so-called Industry 4.0 (e.g., Internet of Things, virtual reality, data analytics, AI) to automate and innovate operations and stay competitive, the continuing existence of legacy operating models and infrastructure make evident the need for changes in the organization's human capital, as required skillsets are evolving rapidly.

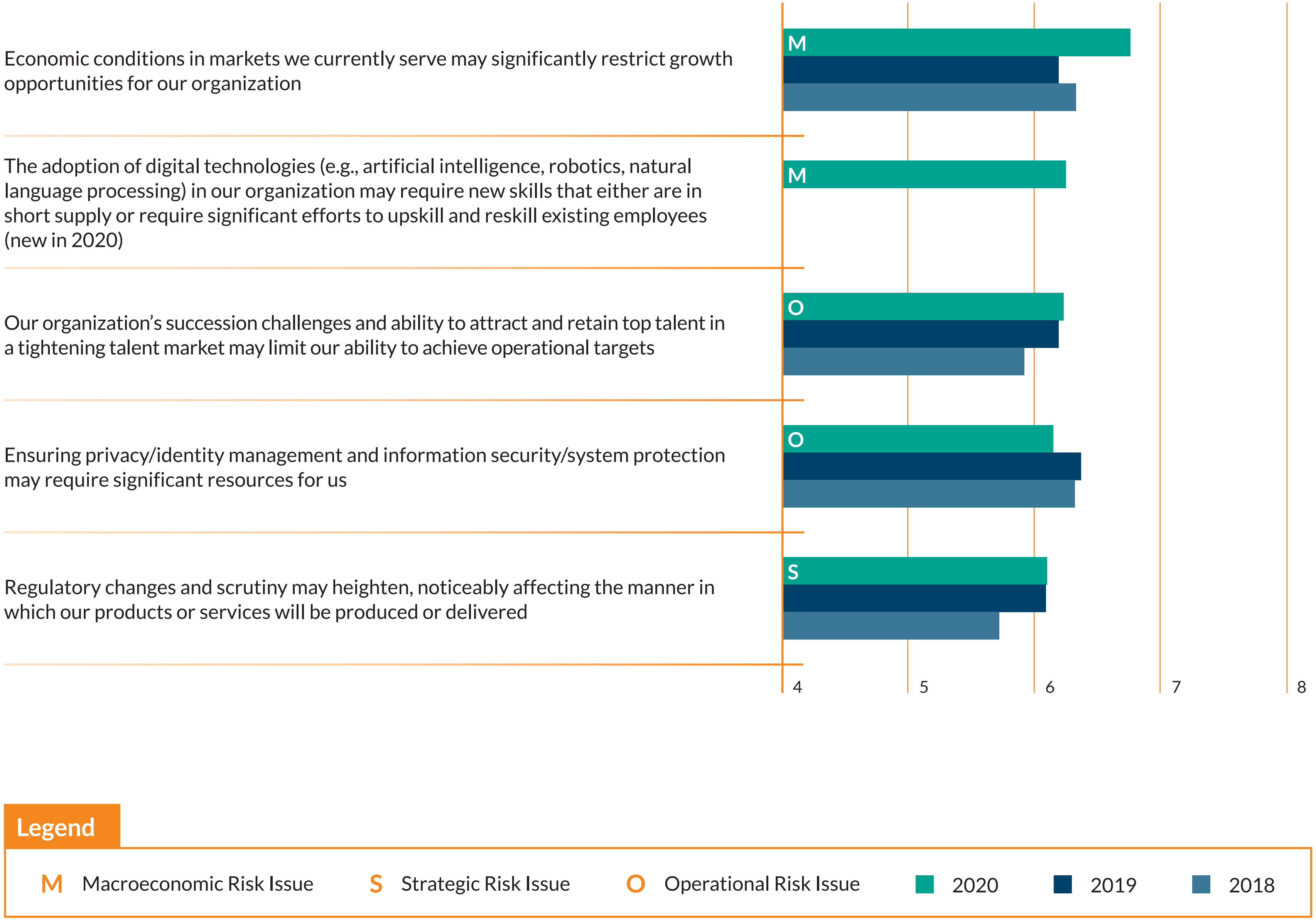
Closely related to this risk is the ability to perform and compete effectively, considering an organization's existing operations, legacy IT infrastructure, and insufficient embrace of digital thinking and capabilities. While falling slightly down the list for 2020 (from second in 2019 to fourth for 2020), this risk issue nonetheless represents the new reality for today's manufacturing organizations. While manufacturing as a more capital-intensive industry may not have as much to worry about with regard to "born digital" entrants compared to other industries such as retail and financial services, these organizations do need to remain focused on keeping pace with or staying ahead of the competition. This includes, but is not limited to, leveraging data warehouses and the power of data analytics, bundling services with products, and employing robotic process automation in back-office functions versus solely on the operating front line.

Rounding out the top five, cyber threats remain a consistent risk issue for manufacturing and distribution organizations worldwide. While the manufacturing sectors comprising this industry group are not as high-profile a target as are financial services or technology organizations, they are still an enticing target for corporate espionage and financial gain. These issues are exacerbated by older IT infrastructures that many manufacturing and distribution organizations still have in place. In fact, recent reports suggest that nearly half of all manufacturing companies have been subject to a cyber incident, with half of those experiencing operational disruption or financial loss. Cyber threats are also a growing concern as digital transformation and Industry 4.0 initiatives continue to be rolled out within organizations, creating new benefits and efficiencies but also exposure to new cyber-related risks.

Interestingly, one of the top risk issues in 2019, evolving changes in global trade policies, did not crack the top five for 2020 (although it is in the top 10 list of risks for this industry group). This is despite continuing developments in global trade, tariffs, and an ongoing war between China and the United States. A perceived lower level of concern about this particular risk could be because companies have already experienced the impact of these issues. Consider that tariffs already have gone into effect, vendor costs and customer prices have been adjusted where possible, and some manufacturing organizations have even taken steps to move manufacturing facilities to other countries to steer clear of, or mitigate the effect of, these policies and tariffs. Nevertheless, global trade policies remain a concern and are likely reflected as part of overall perceptions regarding the global economy.

Each of the top five risks for manufacturing and distribution companies was rated as a "Significant Impact" risk. In addition, the impact of regulatory change and scrutiny on operational resiliency and the manner in which products and services are produced and delivered was rated by the group as a "Significant Impact" risk, although not as a top five risk.

Technology, Media and Telecommunications



Commentary — Technology, Media and Telecommunications Industry Group

There are a number of notable changes for organizations in the Technology, Media and Telecommunications (TMT) industry group for 2020. Perhaps most noteworthy, economic conditions are the top global risk issue for the sector, after not ranking among the top five issues in 2019. For technology organizations especially, there is substantial uncertainty regarding the trajectory of market conditions in 2020, with the potential for economic downturn impacting markets and changing trade policies among numerous contributing factors creating a less-than-clear economic picture.

In the current environment, it is important for TMT organizations to ensure they have proactive contingency plans in place to address any possible downturns in the economy, whether mild or severe. Resilient organizations anticipate and plan by conducting scenario-planning during periods when economic conditions are stable and are therefore prepared if and when conditions change.

The adoption of digital technologies and resulting requirement for new skills is a new risk issue in our survey and underscores the rapid pace at which emerging technologies are being introduced in organizations. The TMT sector continues to be supportive of, and active in, introducing digital technologies into their organizational infrastructure. However, TMT still lags many other industries in a number of areas, including efforts to access new and changing skills, as well as upskilling and reskilling existing employees. Similar to the risk of changing economic conditions, there is a great deal of uncertainty in what is required for skills development to ensure successful adoption of digital technologies. Therefore, TMT organizations need to prioritize planning for this transformation, not only in managing the process and system change but also in developing the requisite talent and skills required for success.

Closely related to developing talent and upskilling and reskilling employees is succession planning and attracting and retaining top talent. Most industries are experiencing challenges accessing skilled and experienced resources, with low unemployment levels continuing to prevail in the United States and a majority of regions worldwide. But this challenge is especially acute for the TMT industry group. These companies are seeking specific skillsets required to meet their strategic objectives, but the pool of available and qualified resources continues to dwindle, and those professionals that are available are in particularly high demand. Moreover, companies also continue to see poaching of their top talent resources by competitors.

To address these challenges, organizations in the industry group are becoming more proactive in implementing alternative labor strategies. This not only includes outsourcing non-core processes and activities and contracting with managed services providers, but also the deployment of increased automation and machine technologies, and a broad scope of flexible work arrangements that can be offered for skilled professionals around the world.

Consistent with prior years, ensuring privacy and the protection of data remains a critical issue for organizations in this industry group. Privacy dropped slightly for 2020 to the fourth position in the top five risks, perhaps reflecting the extensive investment of resources TMT organizations have poured into privacy and data protection-related areas. In addition, finding resources with the requisite skills to stay current in this area remains a challenge, per the earlier discussion on skills and talent shortages. This risk issue unquestionably remains on the radar for board members and C-suite executives in the industry, particularly as more privacy regulations (e.g., similar to the General Data Protection Regulation [GDPR] and the California Consumer Privacy Act [CCPA]) go into effect.

The impact of regulatory changes and increasing legislative scrutiny is another new addition to the top five risk issues for the industry group. There has been extensive media coverage globally on the potential impact of increased regulation on large technology companies, and even some speculation of breaking up some of the largest organizations. There also have been a number of well-publicized regulatory actions and significant fines — largely in the European Union and the United States — amounting to billions of dollars levied against these same organizations. The result is a view that there is an inevitable increase in regulation coming, likely addressing data protection and consumer privacy issues but potentially other issues (e.g., anti-trust) as well. Board members and C-suite executives in the industry group are now well familiar with GDPR, CCPA and other data privacy regulations. However, given the uncertainty about future regulatory changes, there is increasing concern about unknown regulations that may be on the horizon, which could impact the resiliency of TMT operations and the manner in which the group's products and services are produced and delivered. Prudent technology organizations are investing time and resources to develop and build out their compliance functions to prepare themselves for the inevitable increase in regulations that will impact the industry.

"Economic conditions have leapt up in importance for the TMT respondents, reflecting a sense of unease about what might happen in 2020 and beyond. While many businesses have yet to experience an impact, TMT organizations are thinking about economic issues, preparing for potential negative impact, and assessing what such changes might mean for planned investments and growth objectives. There also are concerns about adopting digital technologies effectively. TMT organizations are determining how to harness emerging tech such as AI, robotics, machine learning and natural language processing to the benefit of their operating efficiency and, ultimately, their customers. In addition, companies must make sure they are attracting the skillsets required to effectively position their organizations to utilize these technologies."

Gordon Tucker, Managing Director, Technology, Media and Telecommunications Industry Leader, Protiviti

Healthcare

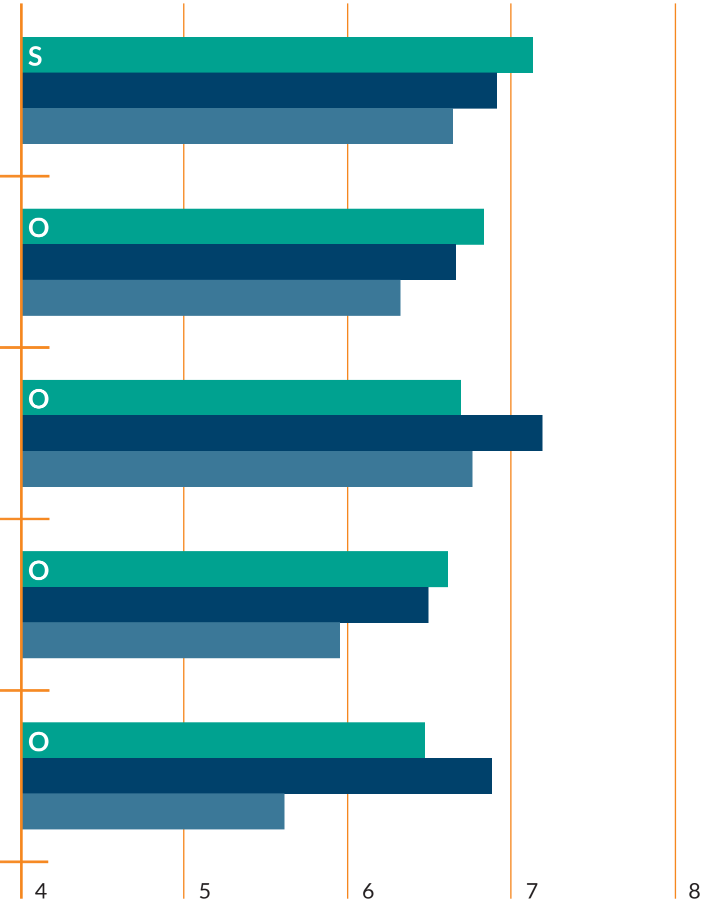
Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered

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

Ensuring privacy/identity management and information security/system protection may require significant resources for us

Resistance to change may restrict our organization from making necessary adjustments to the business model and core operations

Our existing operations, legacy IT infrastructure, and insufficient embrace of digital thinking and capabilities may not meet performance expectations related to quality, time to market, cost and innovation as well as our competitors, especially new competitors that are "born digital" and with a low cost base for their operations, or established competitors with superior operations



Legend

M Macroeconomic Risk Issue · S Strategic Risk Issue · O Operational Risk Issue · 2020 · 2019 · 2018

Commentary — Healthcare Industry Group

The risk landscape for healthcare organizations is significant on numerous fronts, according to views shared by board members and C-suite executives in the industry. Following is commentary on the top five risk issues rated by respondents in the Healthcare industry group.

More regulatory changes and heightened scrutiny

In 2020, regulatory changes and heightened scrutiny will continue to shape the Healthcare industry group and impact not only how organizations identify, address and manage risks, but more importantly, how care will be delivered.

Regulatory compliance will remain a top area of concern in several areas, including, but not limited to, billing and reimbursement; fraud, waste and abuse; physician compensation; and the opioid crisis. In 2019, the Healthcare industry saw significant regulatory action and enforcement that will impact 2020, including several final and proposed rules issued by the Centers for Medicare and Medicaid Services (CMS); increased fraud, waste and abuse actions from the Department of Justice (DOJ) and Office of Inspector General (OIG); and Office for Civil Rights (OCR) settlements that continue to take penalties past the US$100 million mark. In 2020, new mandates and regulations that were born in 2019, such as President Trump's executive order mandating hospitals to provide healthcare prices to patients and consumers in efforts to improve transparency, will take effect, leaving healthcare providers responsible for new mandates never before seen in the industry. The coming year will also bring new areas of risk as fresh trends emerge, such as patient care innovation, telehealth and transitions to value-based care.

Other significant government enforcement actions that likely will remain in 2020 include penalties to post-acute care providers, in-patient rehabilitation facilities, drug diversion fraud stemming from the ongoing opioid crisis, violations of the Affordable Care Act's 60-day rule governing overpayments, and unauthorized disclosures of patient protected health information on social media.

As the DOJ, OIG and OCR continue to enforce penalties and fines against healthcare organizations for fraud, waste and abuse, and privacy and security violations, overall compliance program design and effectiveness are more important than ever. Healthcare organizations are successfully using compliance program effectiveness assessments as a mitigating factor to address and adapt to regulatory change effectively. As they do so, they are also identifying and addressing noncompliant practices in their early stages through the performance of risk assessments and implementation of appropriate controls and auditing and monitoring activities. Furthermore, incorporating compliance risk as part of a greater enterprise risk management function provides a more cohesive perspective on identifying, evaluating and responding to risk.

Succession challenges and ability to attract and retain top talent

According to the U.S. Bureau of Labor and Statistics, the unemployment rate in the United States has reached its lowest rate since 1969. Considerably low unemployment levels prevail in many other regions worldwide, as well. While most would consider this great for economic performance, low unemployment rates create a new set of challenges for healthcare organizations looking to take on ambitious operational targets. While establishing a comprehensive retention strategy remains a top priority, healthcare organizations now must take a contemporary approach to organizational development, one that is not solely focused on recruiting and marketing their organizations in an attempt to attract talent, but also encompasses focused development of its internal talent pool.

Cultivating organizational talent internally is an imperative for healthcare organizations looking to escape the current talent shortages unscathed. In lieu of targeting candidates with specific skillsets, healthcare organizations should define their needs and develop talent that supports their future initiatives and goals. Addressing these challenges in this manner enables a healthcare organization to dictate overall direction, as well as clearly identify and cultivate the talent within existing personnel to get them there.

Given the difficulty of attracting and retaining top talent, healthcare organizations should also remain cognizant of promoting a culture of engagement. One oft-cited quote by management expert Peter Drucker says it clearly: "Culture eats strategy for breakfast." It is imperative for healthcare organizations to create and enforce a culture of engagement with physicians, nurses, clinical staff, executives and administration. In building and sustaining a positive, adaptive and open culture, even the associated boards of these organizations should be involved.

Healthcare organizations must continue to innovate their recruitment and retention practices to ensure a steady pool of talent is available to progress toward their operational targets. Establishing a culture of continuous learning, ensuring their employees are engaged to foster a positive culture, and embracing nontraditional talent pools can not only reduce challenges surrounding identifying appropriate successors, but also serve as a catalyst to increase employee morale and strengthen the organization's position as a best place to work.

Privacy/identity management and information security

Scrutiny on protecting sensitive information continues to increase, while the seemingly ever-changing threat landscape has the healthcare industry struggling to keep pace. For the most part, those in the healthcare delivery segment recognize the importance of this information and just how critical it is — not only due to confidentiality concerns, but also because of the evolving implications to patient safety. As healthcare organizations rely more heavily on technology, outsourced services and third-party partnerships, they struggle to find a balance between responsibility, accountability and constrained resources. Not only do they have to make sure they are protecting their information, but they also must ensure third-party partners will protect that information, as well.

Further compounding matters, as healthcare moves toward more widespread adoption of true digital transformation initiatives (such as robotic process automation, advanced analytics, telehealth, AI, machine learning, wearables), the threat and regulatory landscape grows, as well. Without question, the industry will face new and emerging risks to the privacy and security of sensitive information that will prove to be even more challenging than those of today's environment. It is important to be ever vigilant for these changing risks and proactive in addressing them.

> "As healthcare organizations look forward to 2020, the risk profile has a familiar look to it. The industry not only faces change on the regulatory, privacy and digital fronts, but it also is contending with human capital challenges and internal change resistance. As increased transparency looms on the horizon, healthcare leaders can expect increased competition for services."
>
> Richard Williams, Managing Director, Healthcare Industry Leader, Protiviti

Resistance to change operations

Clinical and operational performance is top of mind for healthcare systems and executives. Pressure is growing for healthcare organizations to lower costs, increase market share, improve clinical outcomes and eliminate waste. If it were simply a matter of changing processes to achieve these goals, healthcare organizations could implement best practices and move on. However, as noted earlier, culture matters and impacts an organization's ability to make the necessary adjustments to clinical practice and operations.

Change management is difficult, as cultural challenges in the industry remain considerable roadblocks to creating the change needed to achieve operational excellence. Changing behavior requires letting go of long-held habits that are familiar and comfortable. This can bring fear of losing something of value. Healthcare systems must continue to evolve and transform — that requires changing clinical practices, operations, behaviors and habits. Healthcare organizations need to establish a clear vision of why change is necessary and understand the key components of enabling the required change.

Most organizations set annual goals and roll out key priorities that impact changes with technology, people, processes, habits, core beliefs, resource allocation, budgets and cultures. Due to the complex environment of most healthcare organizations, a top-down approach is typically used where processes are reviewed based on established best practices, solutions are developed and new practice guidelines are deployed. The challenge is that healthcare organizations repeatedly adhere to these same processes without having the necessary changes implemented effectively, if at all.

Overcoming resistance requires alignment of clinical, administrative and economic goals. Creating alignment is dependent upon developing a deep understanding of what happens on the front line where the work is performed and delivered. This requires a change in approach, from strategic planning to cultural alignment. Using the top-down creation of annual goals with a bottom-up design of solutions is a more effective approach to overcoming resistance to change. This should include employing an effective change management process using a step-by-step approach that incorporates proven techniques and tools, such as lean management, lean process improvement, design thinking and data analytics. It is this creative design approach that yields positive change and sustains it over time. Healthcare organizations that have led transformation and innovation programs successfully are not confined by the traditional approaches but instead embrace disruption led by the frontline clinicians and staff.

In the Healthcare industry, competitive advantage comes from the ability to adapt, transform and innovate, and to do that better than other organizations. Management must evolve from problem solver to facilitator and move from trying to create a perfect solution to co-designing solutions using an iterative process. The convergence between change management and innovative problem-solving can generate breakthrough ideas and is a proven way to garner buy-in from even the most recalcitrant person to changes the organization needs to make. Principles are as important as practices, data informs and provides intelligence, and participatory design inspires creativity and innovation, all of which can lead to the development of solutions that stick.

Existing operations meeting performance expectations, competing against "born digital" firms

Today's healthcare landscape is changing rapidly in terms of how and where care is delivered, as well as how payment for care is rendered. To keep up, healthcare organizations are investing heavily in cutting-edge technology to manage these changes and meet consumer demand and expectations for "connectedness" through digital capabilities. For example, they are replacing legacy infrastructure and systems, embracing the cloud, creating customer-facing websites and apps, and rolling out other innovations using AI, robotic process automation, predictive analytics, and more.

Traditional healthcare organizations must adapt their core business and create new business models to keep up with emerging digitally focused companies (e.g., Amazon, Walmart, CVS, Google, etc.). As these companies become more common, the competition for customers who are demanding higher quality and lower costs is intensifying. At the same time, managing this digital transformation comes with risks that healthcare organizations must address to remain in business and achieve their growth and profitability goals for the future.

Energy and Utilities

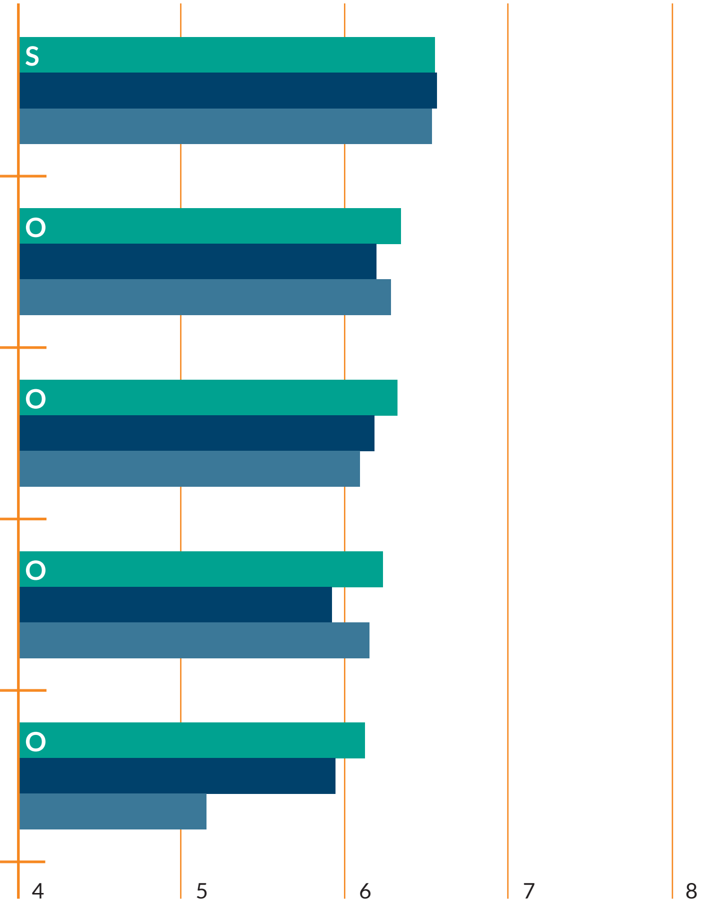
Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered

Resistance to change may restrict our organization from making necessary adjustments to the business model and core operations

Our organization may not be sufficiently prepared to manage cyber threats that have the potential to significantly disrupt core operations and/or damage our brand

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 existing operations, legacy IT infrastructure, and insufficient embrace of digital thinking and capabilities may not meet performance expectations related to quality, time to market, cost and innovation as well as our competitors, especially new competitors that are "born digital" and with a low cost base for their operations, or established competitors with superior operations



Legend

M Macroeconomic Risk Issue   S Strategic Risk Issue   O Operational Risk Issue   2020   2019   2018

Commentary — Energy and Utilities Industry Group

Consistent with prior years of our study, regulatory changes and scrutiny impacting operations and how products and services are produced and delivered is the top risk issue for the industry group in 2020, with a risk score nearly identical between 2019 and 2018. As has been well documented, the oil and gas industry faces many regulatory and governmental threats to operations, including recent tariffs and trade wars, that are impacting companies' value chains, cost of operations and the overall market. Moreover, federal and state legislation continues to impact how and where companies can successfully drill and transport product. In the United States, one of the more significant risk issues is the threat of anti-fracking measures being passed at the state level — such laws likely would have a detrimental effect on long-term operations and revenue for oil and gas companies.

From the perspective of power and utility companies, regulatory issues and potential shifts in policies remain areas with substantial uncertainty. As an example, the European Union has set forth plans for legislation in areas including cybersecurity, market liberalization, decarbonization, and strategic dependency mitigation from non-European energy sources and providers. Globally, many markets continue to focus on climate change and the impact of the Energy and Utilities industry on these issues, contributing to further concerns and uncertainty with regard to the regulatory environment.

Resistance to change in the organization is understandable in the Energy and Utilities industry group, considering that a large percentage of these organizations continue to depend on dated, albeit familiar, legacy systems, processes and practices. Leaders in these organizations recognize the need for change along with persistent levels of resistance in their workforce. The root causes of this resistance often point to the overall culture as well as a potential lack of incentives in the organization to innovate. Building a strong culture focused on innovation and attracting and retaining the right talent are critical long-term challenges facing energy and utility organizations. It is interesting to note that organizational culture related to upward communication of risk issues, a top five risk for the industry group in 2019, fell from the list of top risk issues for 2020. While it might not still be in the top five, concerns about resistance to change also point to the need to focus more on building the right organizational culture for the future.

Cyber threats that have the potential to disrupt core operations significantly remain a consistent top risk issue for energy and utility organizations. This is understandable given the ongoing adoption of digital systems and new technologies on which many of these organizations are focused. With operations becoming increasingly more connected and digital, cyber threats become even more diverse, with potentially devastating consequences. From customer data to control over major electrical grids or industrial control systems, these are critical risk issues on which organizations need to be focused. And different jurisdictions are taking note, as well. For example, in the European Union, power and utility organizations are now required to adhere to a directive on security of network and information systems, which is required to be implemented for all "strategic assets." As we have noted in prior years, it is a positive development to see this risk issue garnering significant attention from board members and C-suite executives, which likely is contributing to more adequate levels of cyber risk mitigation efforts.

A new top five risk issue for the industry group in 2020 is succession challenges and the ability to attract and retain top talent in a tightening labor market. This is a prevalent risk issue for many industry groups but may present an especially unique challenge for energy and utility organizations. There are a couple of factors at play here. First, competition for top talent is fierce and driving up compensation costs. This is not a critical concern when commodity prices are stable and production is high. There likely is a concern, however, that if or when commodity prices and production levels fall, finding and retaining the right talent at affordable levels could prove challenging.

The second factor is a longer-term concern and may be even more challenging. Studies show that new generations care deeply about issues such as climate change as part of broader environmental, social and governance (ESG) concerns. These younger generations are hesitant to enter an industry that is perceived to be detrimental to the environment and climate change initiatives. Energy and utility organizations need to embrace new strategies for recruiting and retaining talent, including, but not limited to, broadening the scope of skillsets and sources from which to find potential candidates. Long term, it also is important for these organizations to potentially diversify their assets and explore ways to limit their effect on the environment, along with strengthening their reporting of these activities and their results to shareholders and stakeholders. More organizations in the industry group are beginning to report annually, and some even quarterly, on progress they are achieving to combat climate change. Bottom line: From the perspective of talent retention as well as other strategic objectives, an investment in ESG stewardship and reporting should no longer be considered an option, but rather an essential requirement.

Another new top five risk issue for the industry group in 2020 is competing against "born digital" organizations. This is a prevalent concern throughout most sectors of the industry group, in which there is a general belief that organizations are behind in their efforts to innovate. Strides are being achieved in automating operations in certain areas, but the industry is far from digitally mature.

Oil and gas companies continue to pursue innovation for more efficient and productive drilling methods, but have been resistant to making huge investments in back-office digital efforts. That trend is changing as those technologies become more mature and organizations look for ways to minimize their break-even point. The industry also is becoming increasingly concerned with the future of oil and gas given the rise of renewables, EVs and other technological breakthroughs that will continue to shift consumer demand.

Power and utility organizations have similar challenges, although they might be embracing innovation more considering that they have a closer connection to end-user customers that are demanding to be more digitally connected. There is also an incentive to invest in new technology such as smart grids, smart metering and renewables, among others, as a means toward achieving higher levels of sustainability — for the company and the environment.

"The top risk we see year over year in the Energy and Utilities industry group is around regulatory issues. On top of the typical challenges for these organizations, climate change and the focus on becoming a more sustainable industry likely contribute to related regulatory risks being top of mind for board members and executives. Those issues are also tied closely to succession challenges and the ability to attract and retain top talent, given that new generations have a strong focus on the environment. These organizations recognize that attracting new talent is a significant challenge when this generation appears averse to working in an industry they perceive to be harmful. In response to these risks, more organizations are prioritizing sustainability and environmental programs."

Tyler Chase, Managing Director, Energy and Utilities Industry Leader, Protiviti

Analysis Across Geographic Regions

For this year's report (as in 2019), we obtained a sufficient number of organizations across the globe to split the sample into eight distinct regions: 418 North America-based organizations (NA), 233 organizations based in continental Europe and the United Kingdom (EUR), 79 organizations from Australia/New Zealand (ANZ), 111 organizations from Asia (A), 74 organizations based in Latin America (LA), 75 organizations from the Middle East (ME), 52 organizations from India (IND), and 21 organizations based in Africa (AFR).

We analyzed responses across the eight groups to determine whether respondents across different geographic locations rank-order risks differently. Similar to our analysis summarized earlier in this report, we analyzed responses about overall impressions of the magnitude and severity of risks across the three categories. Again, the scores in the table below reflect responses to the question about their overall impression of the magnitude and severity of risks their organization will be facing with respect to reaching or exceeding profitability (or funding) targets over the next 12 months, using a 10-point scale where 1 = "Extremely Low" and 10 = "Extremely High."

Overall, what is your impression of the magnitude and severity of risks your organization will be facing with respect to reaching or exceeding profitability (or funding) targets over the next 12 months?	2020	2019	2018
North America-based Organizations	6.1	5.6	5.7
Europe-based Organizations	6.2	6.4	6.4
Australia/New Zealand-based Organizations	6.1	6.7	N/A
Asia-based Organizations	6.2	6.6	N/A
Latin America-based Organizations	6.5	7.1	N/A
Middle East-based Organizations	6.3	6.8	N/A
India-based Organizations	5.8	7.0	N/A
Africa-based Organizations	5.7	5.6	5.3

Globally, organizations from six of the eight geographic regions agree that the overall magnitude and severity of risks are of a "Significant Impact" level in 2020. Except for North America-based organizations, all regions included the risk of deteriorating economic conditions in their top five, with five of the eight ranking it as their number one risk concern. The Australia/New Zealand, Asia and Latin America regions all rate each of their top five risks higher than 6.5, indicating elevated levels of concern relative to other regions in our report.

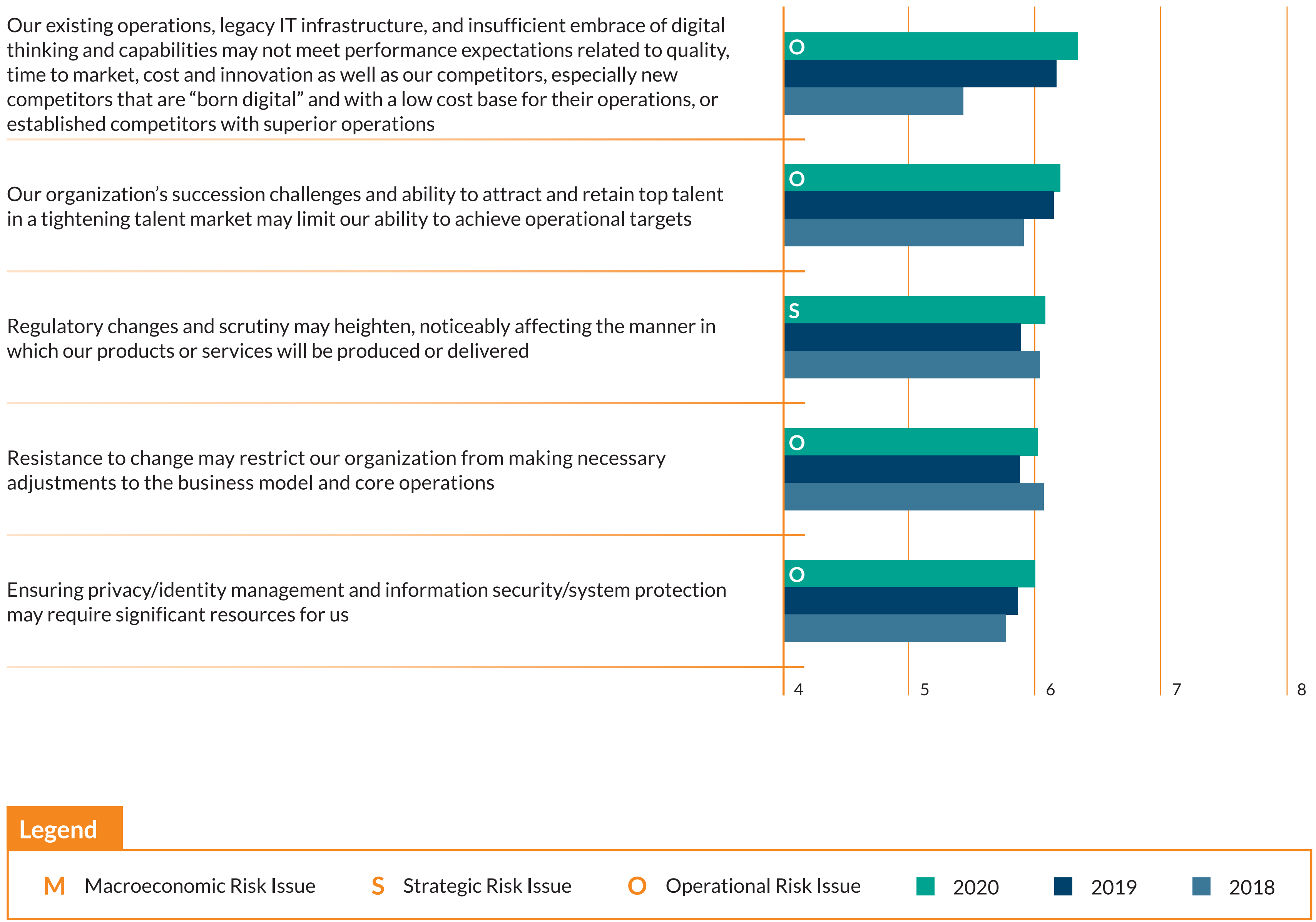
Across the eight regions, the similarities and differences are interesting. Operational risks dominate most top five lists, led by the North America region, which includes four operational risks in the top five (the fifth risk is related to concerns over increased regulatory scrutiny). The concern over increased regulation and its impact on operational resilience, products and services is shared by all regions — it ranks first or second in seven of the eight regions (third in North America). Except for India and Africa, three operational risks appear in each of the remaining regions (India and Africa included two operational risks in their top five). In most regions, risks related to succession challenges and the ability to attract and retain key personnel appear as a top five risk. Also, privacy/identity protection and perceived readiness against cyber threats are also included in the top five risk lists for most regions. The various operational risks rated as "Significant Impact" may be so rated because of their ramifications to the strategy-setting process and to strategic execution itself.

The bar charts that follow provide the detailed top five risks from each of the eight geographic regions we examined and include the risk scores for 2020 and, where available, scores for those risks reported in our 2019 and 2018 reports.

> "Once again, we are excited by the extent of global participation in this year's survey. Not only did total participation increase significantly over last year, but we also captured insights from C-suite executives and directors from all over the world — 39% of the participants represented companies based in North America; 22% in Europe; 18% in Asia, Australia and New Zealand; and the remaining 21% from Latin America, India, Africa and the Middle East."
>
> Andrew Clinton, Executive Vice President, International Operations, Protiviti

TABLE OF CONTENTS

North America HQ Organizations



Europe HQ Organizations

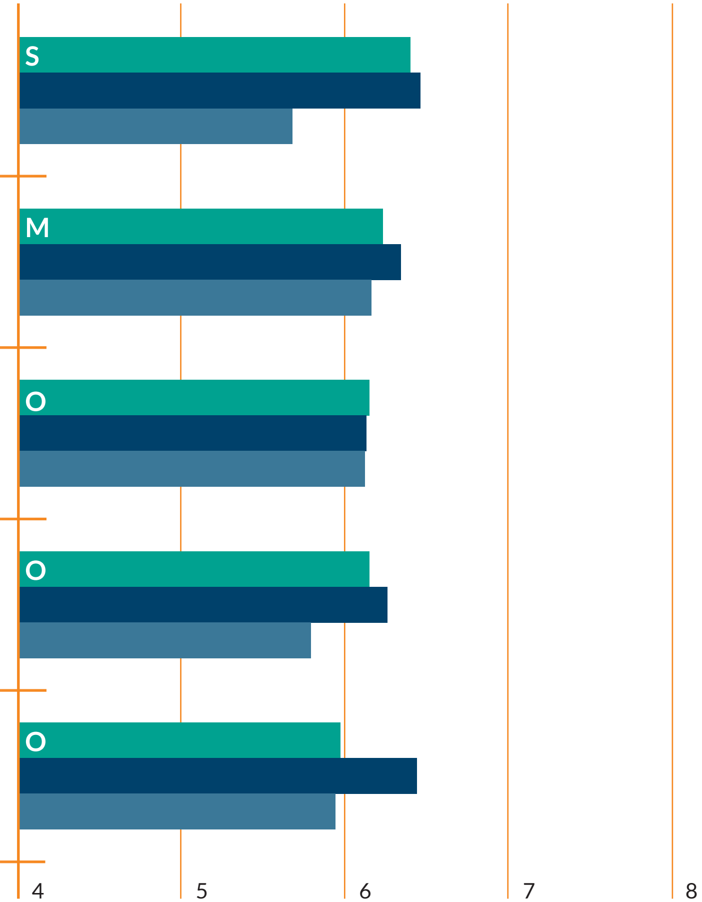
Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered

Economic conditions in markets we currently serve may significantly restrict growth opportunities for our organization

Resistance to change may restrict our organization from making necessary adjustments to the business model and core operations

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 existing operations, legacy IT infrastructure, and insufficient embrace of digital thinking and capabilities may not meet performance expectations related to quality, time to market, cost and innovation as well as our competitors, especially new competitors that are "born digital" and with a low cost base for their operations, or established competitors with superior operations



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M Macroeconomic Risk Issue S Strategic Risk Issue O Operational Risk Issue 2020 2019 2018

Australia/New Zealand HQ Organizations

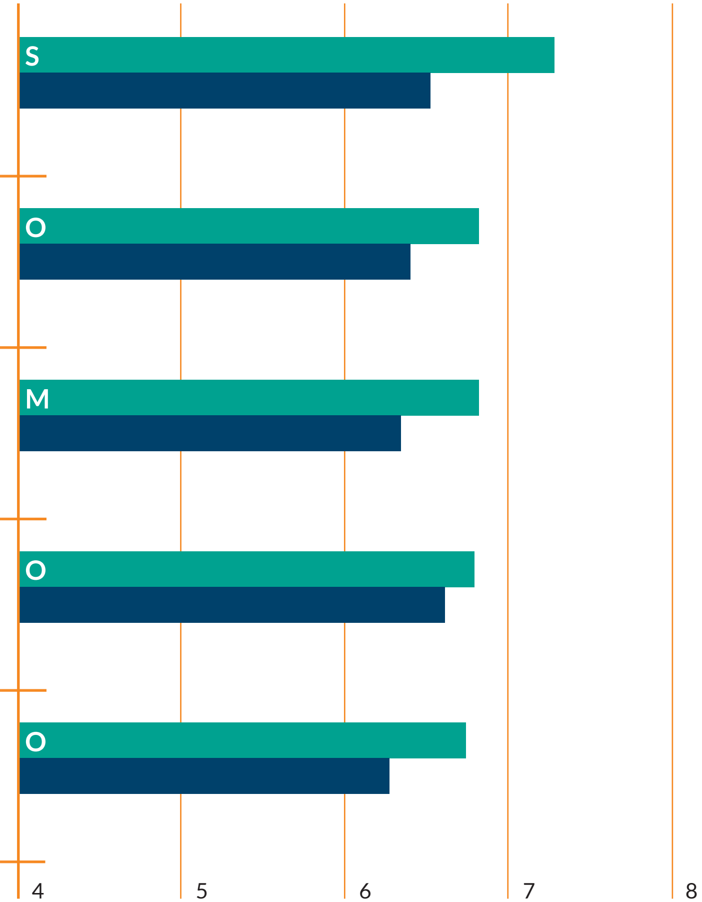
Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered

Ensuring privacy/identity management and information security/system protection may require significant resources for us

Economic conditions in markets we currently serve may significantly restrict growth opportunities for our organization

Our existing operations, legacy IT infrastructure, and insufficient embrace of digital thinking and capabilities may not meet performance expectations related to quality, time to market, cost and innovation as well as our competitors, especially new competitors that are "born digital" and with a low cost base for their operations, or established competitors with superior operations

Our organization may not be sufficiently prepared to manage cyber threats that have the potential to significantly disrupt core operations and/or damage our brand



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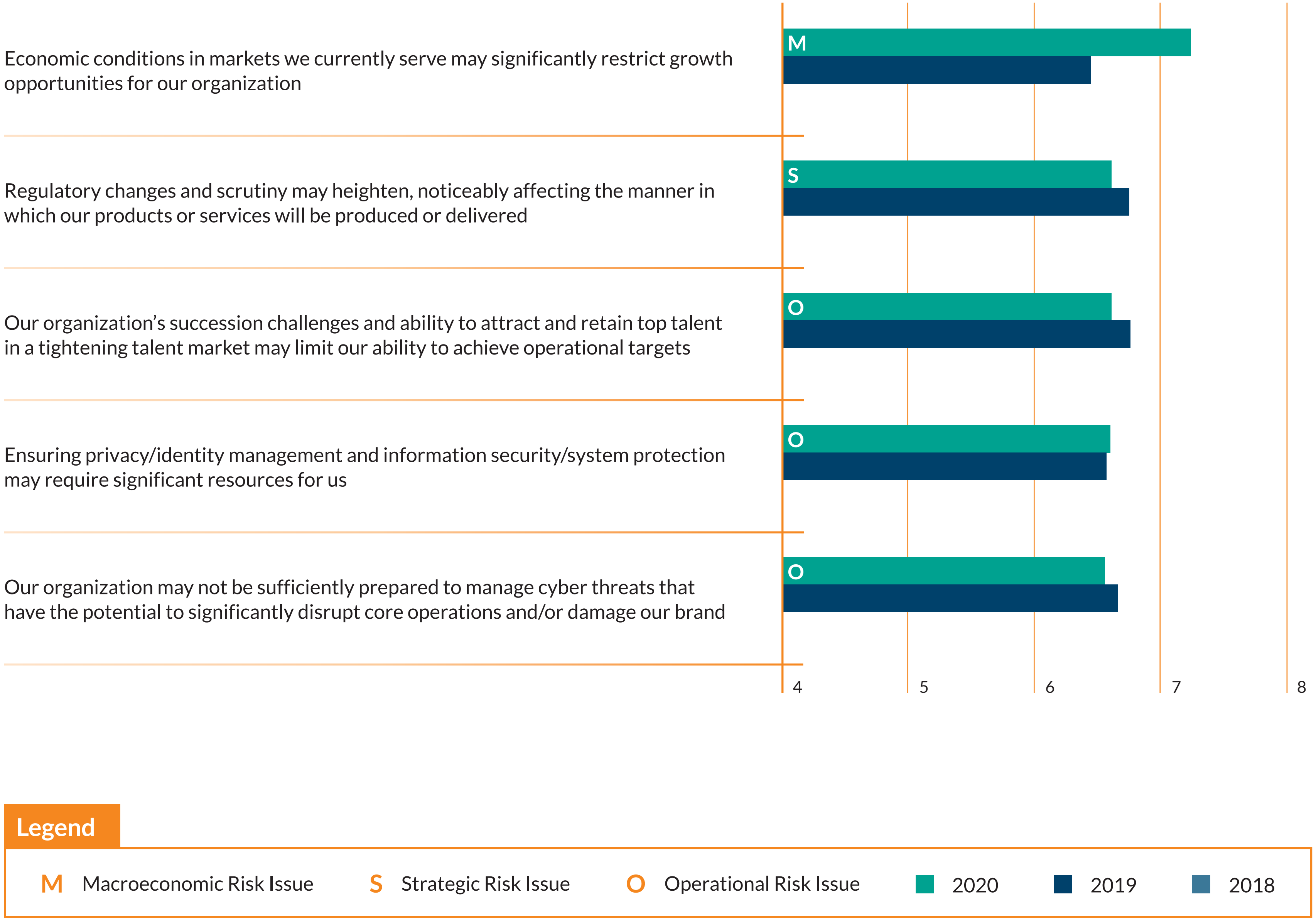
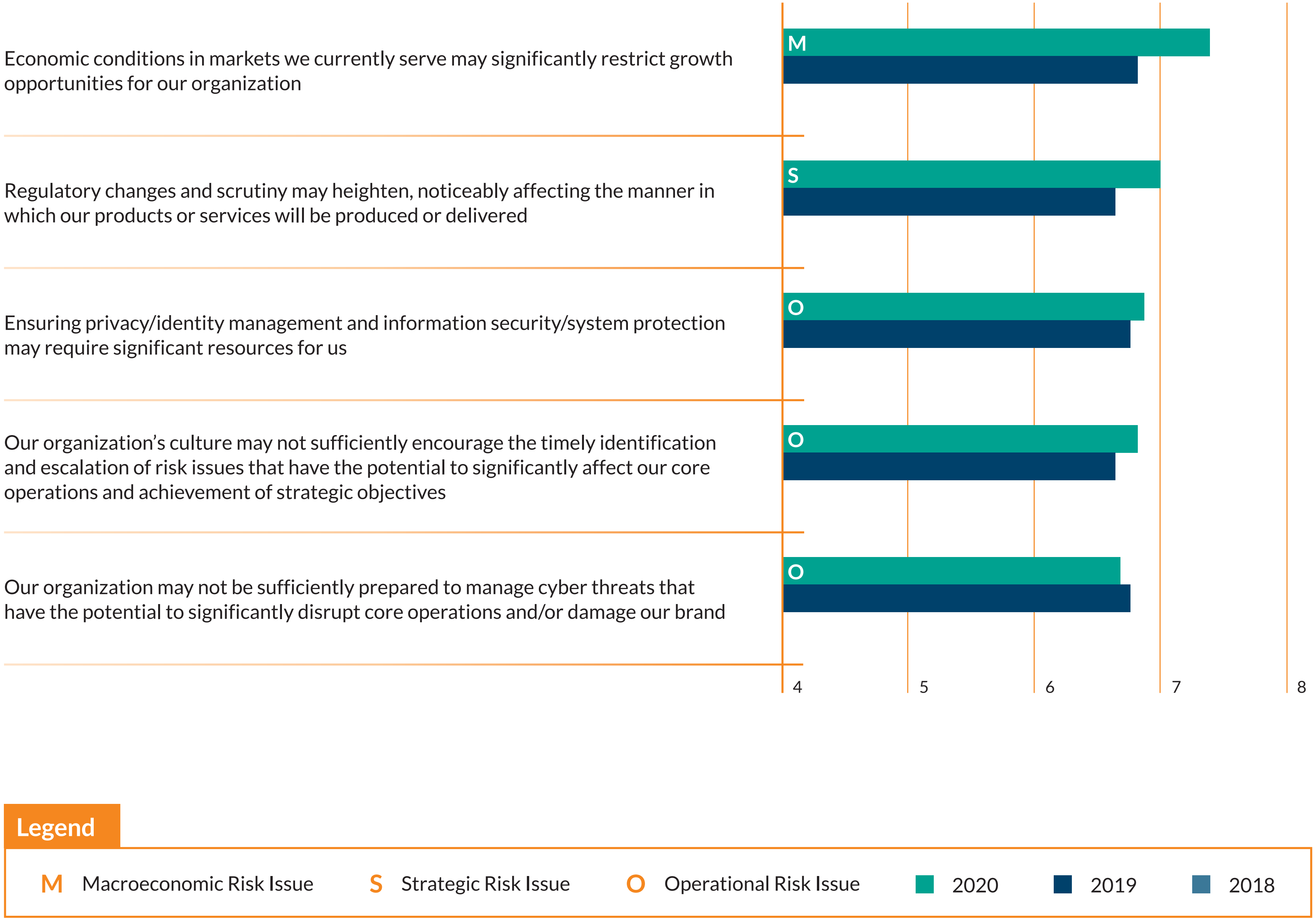
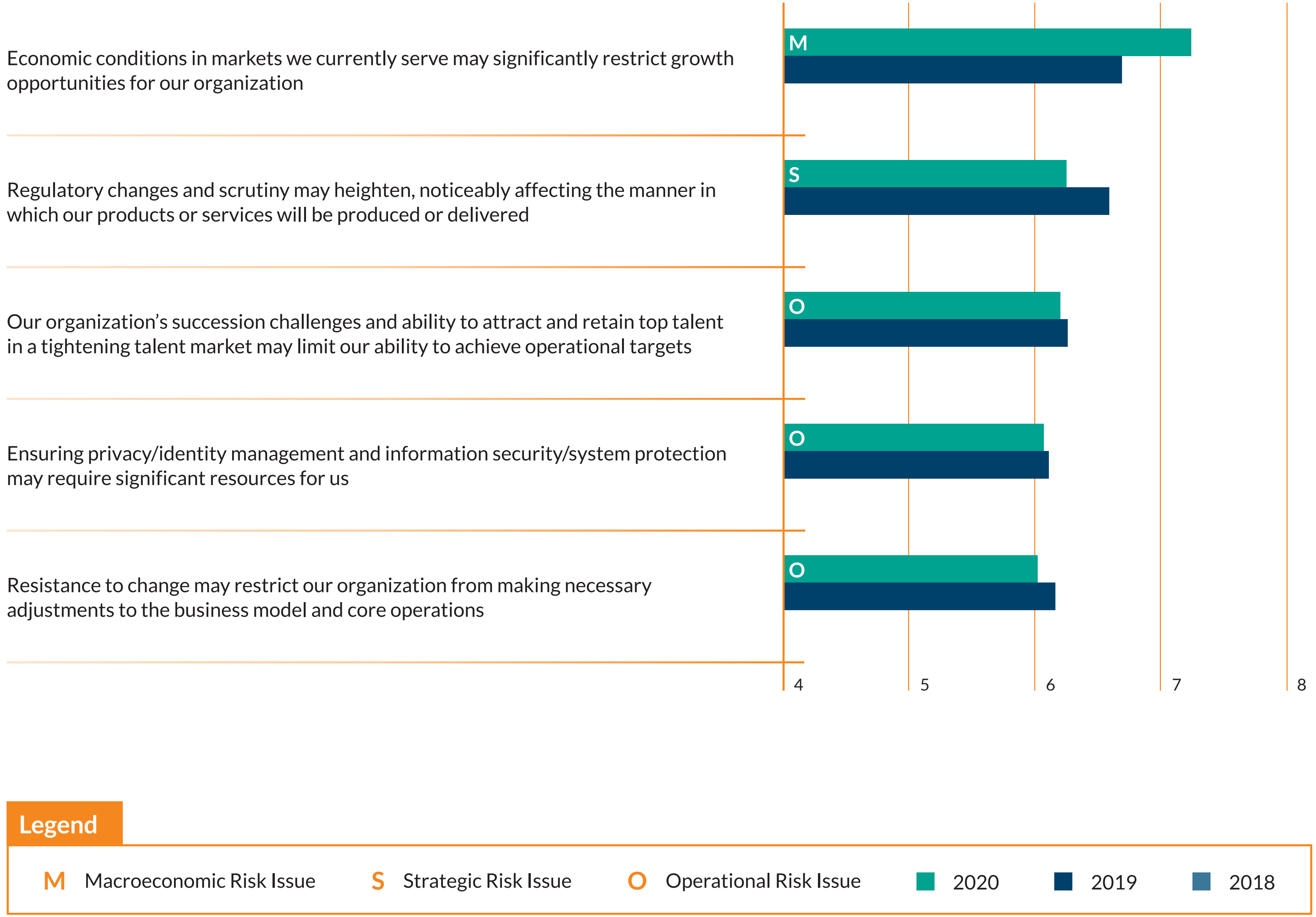
Asia HQ Organizations



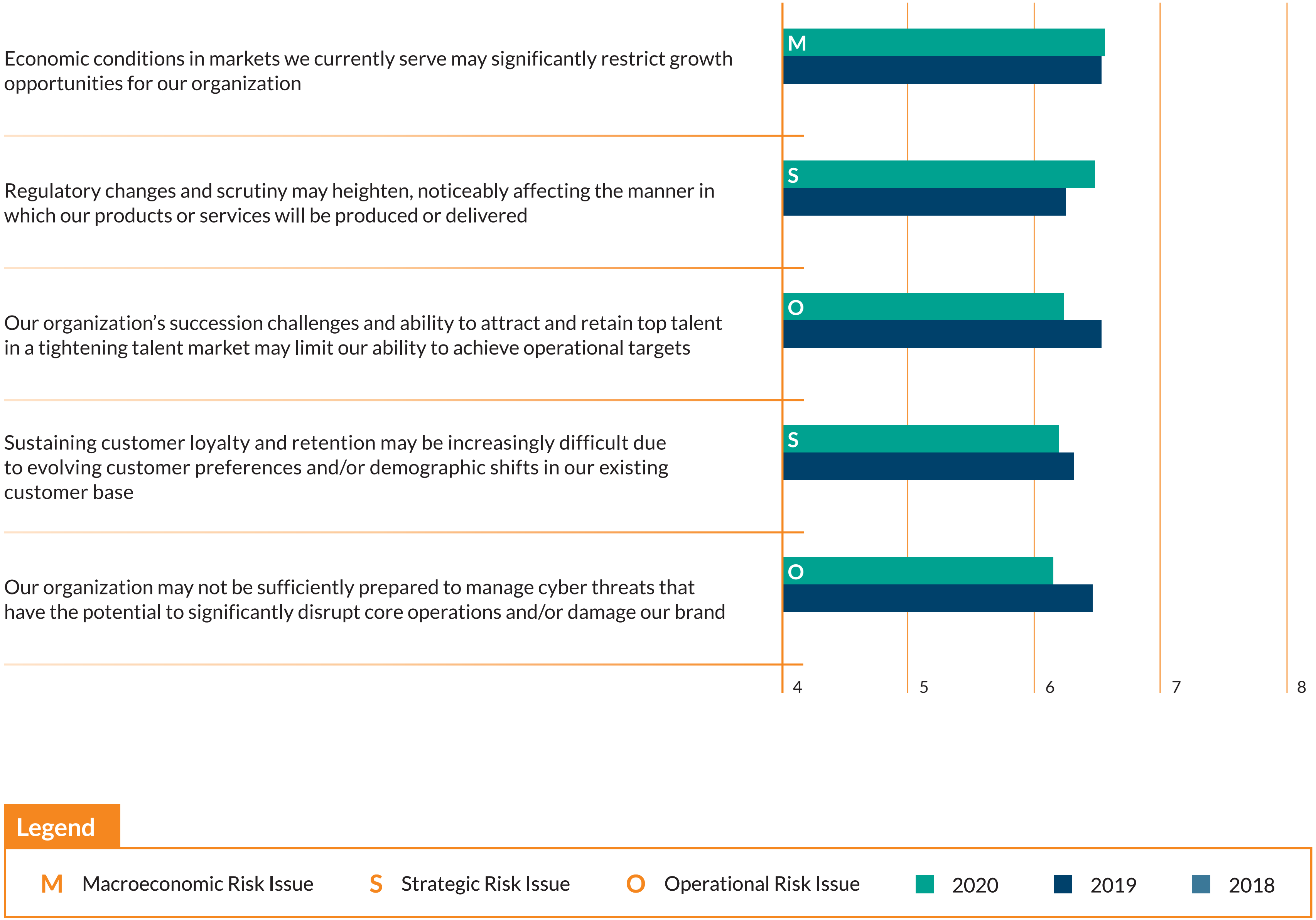
Latin America HQ Organizations



Middle East HQ Organizations



India HQ Organizations



Africa HQ Organizations

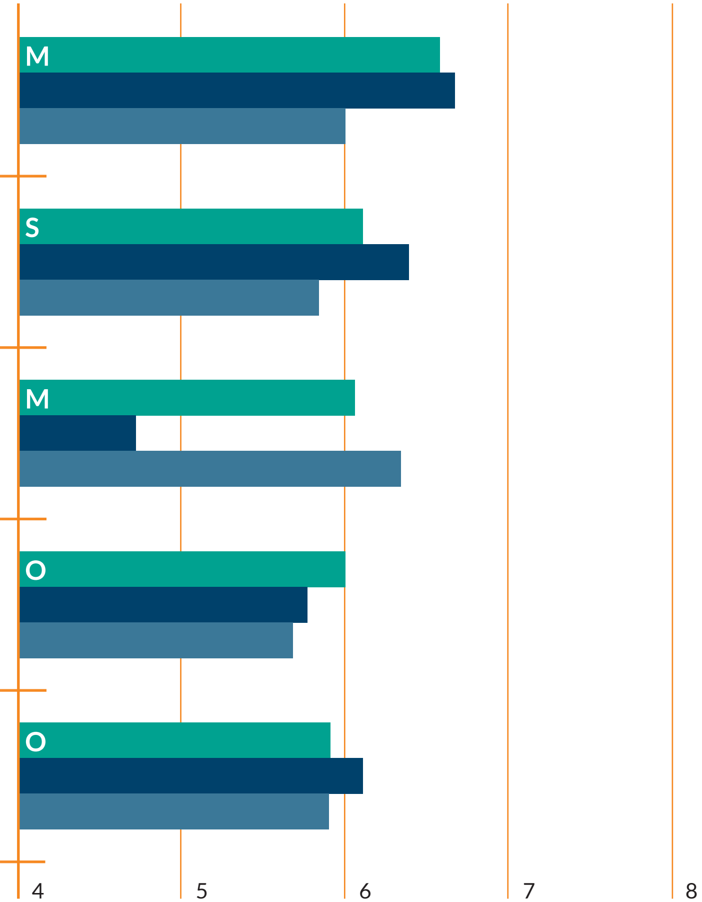
Economic conditions in markets we currently serve may significantly restrict growth opportunities for our organization

Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered

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

Our organization may not be sufficiently prepared to manage cyber threats that have the potential to significantly disrupt core operations and/or damage our brand

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



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M Macroeconomic Risk Issue S Strategic Risk Issue O Operational Risk Issue 2020 2019 2018

Analysis Across Public and Non-Public Entities

Participants in the survey represent three types of organizations: publicly traded companies (580 respondents), privately held for-profit entities (298 respondents), and not-for-profit and governmental organizations (185 respondents).

We analyzed responses across these three types of entities to determine whether different types of organizations rank-order risks differently. Similar to our analysis summarized earlier in this report, we analyzed responses about overall impressions of the magnitude and severity of risks across the three organizational type categories. Again, the scores in the table below reflect responses to the question about their overall impression of the magnitude and severity of risks their organization will be facing with respect to reaching or exceeding profitability (or funding) targets over the next 12 months, using a 10-point scale where 1 = "Extremely Low" and 10 = "Extremely High."

Overall, what is your impression of the magnitude and severity of risks your organization will be facing with respect to reaching or exceeding profitability (or funding) targets over the next 12 months?	2020	2019	2018
Public Companies	6.3	6.2	6.1
Privately Held For-Profit Companies	5.9	6.3	6.0
Not-for-Profit and Governmental Organizations	5.9	5.9	5.5

The magnitude and severity of risks for public companies continues to increase, rising from 6.1 in 2018 to 6.2 last year and 6.3 looking forward into 2020. Not-for-profit and governmental organizations have the same outlook as in 2019, while private companies perceive a reduction in the magnitude and severity of risks they will face in the coming year, falling from 6.3 to 5.9.

Public companies, as well as not-for-profit and governmental organizations, rate all of their top five risks for 2020 at the "Significant Impact" level. Privately held for-profit companies rate only one risk, related to concerns over economic conditions, at the "Significant Impact" level. It is interesting that both private for-profit entities and not-for-profit and governmental organizations seem to view the overall risk landscape equally (both groups scored the overall magnitude and severity of risks in 2020 at 5.9), while the top five risk concerns of the not-for-profit and governmental organizations scored higher on average.

The top four risks for both public and private companies are identical (though public companies uniformly scored them higher). The number one risk for both groups is a concern over deteriorating economic conditions in 2020. Likewise, the number two risk for both groups relates to the restrictive/disruptive impact of increased regulatory scrutiny in the coming year. The remaining top five risks for both groups are operational — and only the fifth risk is different for the two. All five of the top risks identified by not-for-profit and governmental organizations are operational risks.

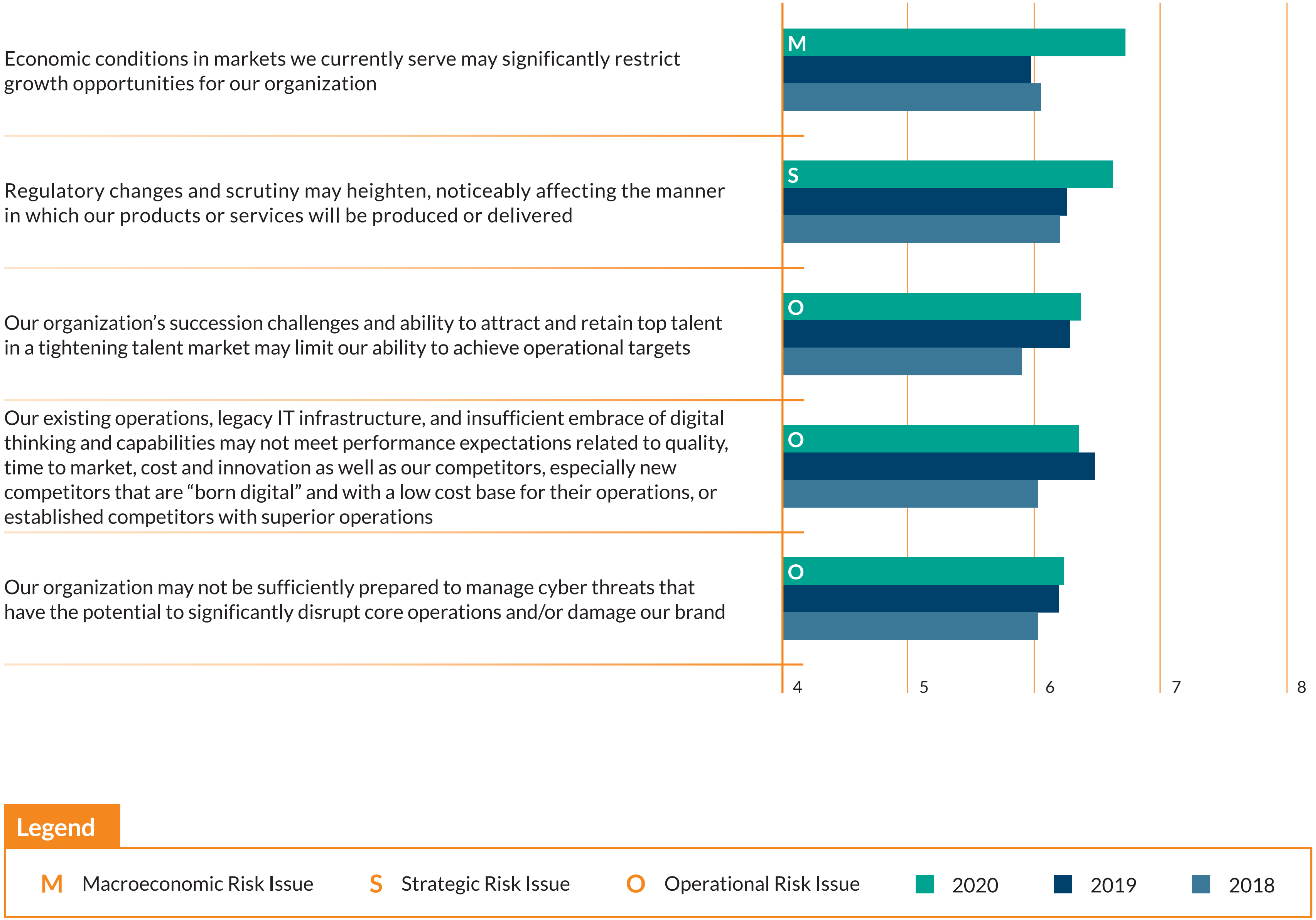
All of the organizations are concerned about succession and talent challenges, with that issue in the top five risks for each of the organization types. Public companies also rank concerns about cyber risks in their top five risks, while private for-profit companies rank concerns about resistance to change as part of the top five. Four of the top five risks for not-for-profit and governmental organizations also appear on one or both of the top five lists for public or private companies. Interestingly, though, the number one risk issue for not-for-profit and governmental organizations — ensuring privacy/identity management — appears uniquely in those organizations' list of top five risk issues for 2020.

"To no one's surprise, public companies expect a higher level of risk in 2020 from a magnitude and severity standpoint than privately held, not-for-profit and governmental organizations. Interestingly, the risk profiles for public and private companies reflect concerns with similar issues; however, public companies not only rated the risks higher, but the risk ratings continue to rise."

Don Pagach, Professor of Accounting, Director of Research, Enterprise Risk Management Initiative, Poole College of Management, NC State University

TABLE OF CONTENTS

Public Companies



Privately Held For-Profit Companies

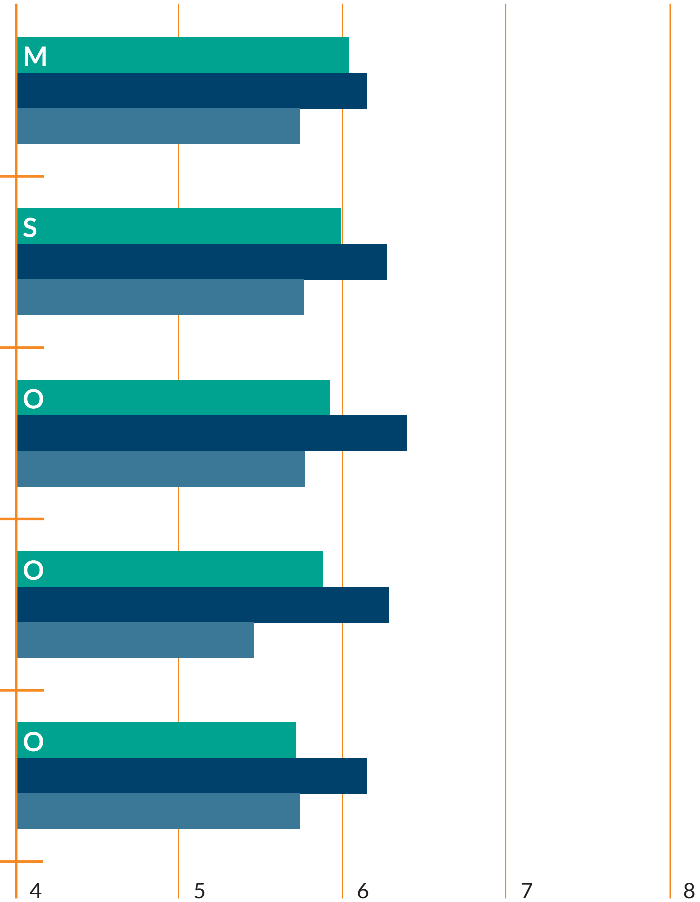
Economic conditions in markets we currently serve may significantly restrict growth opportunities for our organization

Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered

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 existing operations, legacy IT infrastructure, and insufficient embrace of digital thinking and capabilities may not meet performance expectations related to quality, time to market, cost and innovation as well as our competitors, especially new competitors that are "born digital" and with a low cost base for their operations, or established competitors with superior operations

Resistance to change may restrict our organization from making necessary adjustments to the business model and core operations



Legend

M Macroeconomic Risk Issue S Strategic Risk Issue O Operational Risk Issue ■ 2020 ■ 2019 ■ 2018

Not-For-Profit and Governmental Organizations

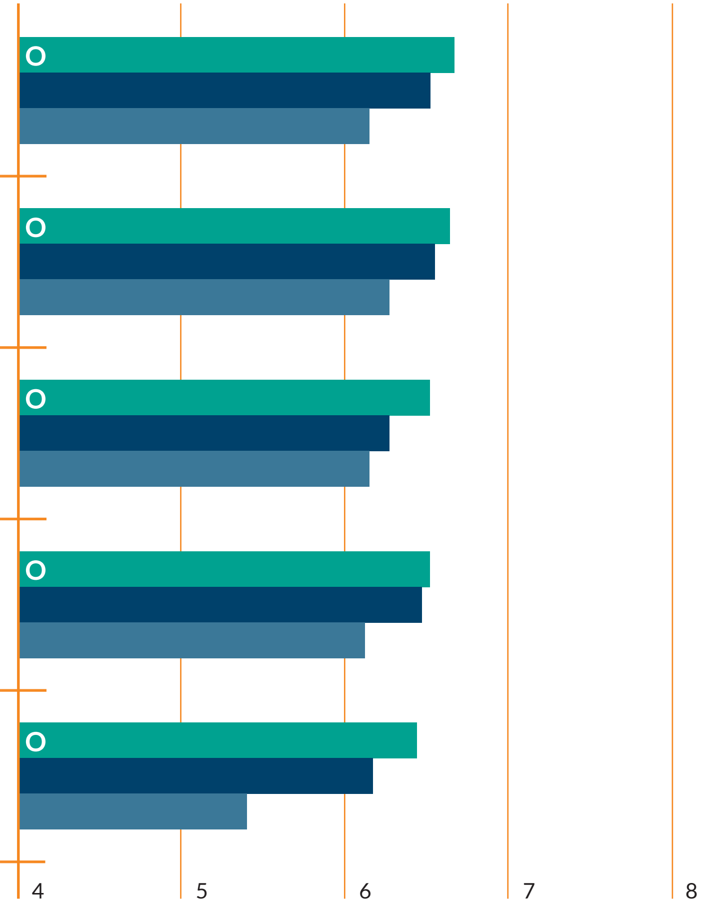
Ensuring privacy/identity management and information security/system protection may require significant resources for us

Resistance to change may restrict our organization from making necessary adjustments to the business model and core operations

Our organization may not be sufficiently prepared to manage cyber threats that have the potential to significantly disrupt core operations and/or damage our brand

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 existing operations, legacy IT infrastructure, and insufficient embrace of digital thinking and capabilities may not meet performance expectations related to quality, time to market, cost and innovation as well as our competitors, especially new competitors that are "born digital" and with a low cost base for their operations, or established competitors with superior operations



Legend

M Macroeconomic Risk Issue   S Strategic Risk Issue   O Operational Risk Issue   2020   2019   2018

Plans to Deploy Resources to Enhance Risk Management Capabilities

Recall that we asked respondents about their overall impression of the perceived magnitude and severity of risks to be faced in 2020. The respondents' overall response suggests a small decrease in the nature of the overall risk environment, with an average score of 6.1 in 2020 relative to 6.2 in 2019.

Overall, what is your impression of the magnitude and severity of risks your organization will be facing with respect to reaching or exceeding profitability (or funding) targets over the next 12 months?	2020	2019	2018
	6.1	6.2	6.0

In light of the risk environment, we also asked executives to provide insights about whether their organization plans to devote additional resources to improve risk management over the next 12 months. We used a 10-point scale, whereby 1 signifies "Extremely Unlikely to Make Changes" and 10 signifies "Extremely Likely to Make Changes."

Consistent with the finding that respondents noted a decrease in their impression about the magnitude and severity of overall risks for 2020 relative to the prior year, they also indicate a lower likelihood of deploying more resources to risk management in 2020 relative to 2019. Notwithstanding this small decrease, we believe there continues to be a need to invest in more robust risk management capabilities.

How likely is it that your organization will devote additional time and/or resources to risk identification and management over the next 12 months?	2020	2019	2018
	6.2	6.4	6.1

We also asked respondents a new question in 2019, and again in 2020. Specifically, we asked, "Over the next 12 months, to what degree do you believe your organization will experience challenges to sustaining and/or strengthening the coordination and exchange of risk information among senior management, front-line business unit and process owners, second-line risk management leaders, and relevant subject-matter experts within the organization?" On a scale of 1 to 10, the average score for this question was 5.9, a decline from the 6.2 score reported in 2019.

Over the next 12 months, to what degree do you believe your organization will experience challenges to sustaining and/or strengthening the coordination and exchange of risk information among senior management, front-line business unit and process owners, second-line risk management leaders, and relevant subject-matter experts within the organization?	2020	2019	2018
	5.9	6.2	N/A

The Financial Services industry group expressed the greatest likelihood to devote additional time and resources toward risk management in 2020, followed by the Manufacturing and Distribution and Energy and Utilities industry groups. Only the Energy and Utilities industry group indicated the same level of likelihood to make investments in risk management processes relative to 2019. The other five industry groups all indicated lower likelihood to invest more in risk management capabilities in 2020 relative to 2019, with the Consumer Products and Services industry group decreasing the most (from 6.1 in 2019 to 5.7 in 2020).

Likelihood that the organization plans to devote additional resources to risk management over the next 12 months

Full Sample			Financial Services			Consumer Products and Services			Manufacturing and Distribution			Technology, Media and Telecommunications			Healthcare			Energy and Utilities		
2020	2019	2018	2020	2019	2018	2020	2019	2018	2020	2019	2018	2020	2019	2018	2020	2019	2018	2020	2019	2018
6.2	6.4	6.1	6.6	6.7	6.3	5.7	6.1	6.0	6.2	6.4	6.3	6.0	6.4	6.3	6.0	6.1	5.9	6.1	6.1	5.2

"Due to the speed of change, growing market volatility and complexity, increased investor expectations, greater regulatory pressure, and the continued impact of digital technologies on virtually every business process, now more than ever companies must ask the following question regarding their approach to enterprise risk management: 'Are we seeking to comply and conform or are we looking to become a more risk-informed organization?'"

Emma Marcandalli, Managing Director, Protiviti

Over the next 12 months, to what degree do you believe your organization will experience challenges to sustaining and/or strengthening the coordination and exchange of risk information among senior management, front-line business unit and process owners, second-line risk management leaders, and relevant subject-matter experts within the organization?	2020	2019
Full Sample	5.9	6.2
Financial Services	5.9	6.2
Consumer Products and Services	5.6	6.0
Manufacturing and Distribution	6.0	6.4
Technology, Media and Telecommunications	5.8	6.1
Healthcare	6.4	6.8
Energy and Utilities	5.9	6.0

All six industry groups reported a decrease from 2019 to 2020 when asked about challenges they face in sustaining or strengthening the coordination and exchange of risk information within their organizations. Perhaps this is a result of continued investment in developing more robust risk management processes over time.

We also analyzed responses to these two questions across different sizes of organizations — the largest organizations (those with revenues greater than $10 billion) exhibit the greatest decrease in the likelihood that they plan to deploy additional resources to risk management (falling from 6.9 to 6.2). This is a somewhat surprising result given that these organizations are likely to be most exposed to the overall risk environment that is growing in complexity. The second largest organization size group (revenues between $1 billion and $9.99 billion) actually indicates the highest likelihood of additional resources being committed to risk management efforts. As in 2019, the smallest organizations expressed the lowest likelihood that they will be investing in more robust risk identification and management over the next 12 months. The two largest groups of organizations also believe that they may face higher levels of challenges in sustaining or strengthening their risk management processes compared to smaller organizations.

Likelihood that the organization plans to devote additional resources to risk management over the next 12 months														
Full Sample			Revenues $10B or Higher			Revenues $1B – $9.9B			Revenues $100M - $999M			Revenues Less than $100M		
2020	2019	2018	2020	2019	2018	2020	2019	2018	2020	2019	2018	2020	2019	2018
6.2	6.4	6.1	6.2	6.9	6.4	6.4	6.3	6.0	6.2	6.4	6.2	5.7	5.6	6.0

Over the next 12 months, to what degree do you believe your organization will experience challenges to sustaining and/or strengthening the coordination and exchange of risk information among senior management, front-line business unit and process owners, second-line risk management leaders, and relevant subject-matter experts within the organization?	2020	2019
Full Sample	5.9	6.2
Revenues $10B or Higher	6.1	6.6
Revenues $1B — $9.9B	6.1	6.3
Revenues $100M — $999M	5.9	6.2
Revenues less than $100M	5.4	5.4

Public companies expressed similar levels of likelihood that they plan to invest more time and resources in building out their risk management infrastructure in 2020 (6.4) relative to 2019 (6.5). However, we observed a large reduction in this expectation for private entities looking forward to 2020 relative to prior years. In 2020, the mean response to this question was 5.7 versus 6.5 in 2019 and 6.3 in 2018. In contrast, not-for-profit and governmental organizations indicated that they will be increasing resources devoted to risk management in 2020 when compared to prior years, possibly to address increasing concerns with respect to privacy issues — the number one risk for this organization type. The 2020 response is 6.2 versus 5.9 in 2019 and 5.8 in 2018. The reduced enthusiasm of private for-profit entities in our sample this year for continued investment in risk management activities is consistent with the reduced concern they express over the magnitude and severity of risks in 2020 and challenges in sustaining and/or strengthening the coordination and exchange of risk information (5.4 in 2020 versus 6.3 in 2019). Private for-profit companies report economic conditions as their number one risk concern for 2020 and generally have less resources than public companies; therefore, investments in risk management capabilities may be especially sensitive to assessments of reduced risk for these organizations.

Likelihood that the organization plans to devote additional resources to risk management over the next 12 months

Full Sample			Publicly Traded Companies			Privately Held For-Profit Enterprises			Not-for-Profit and Governmental Organizations		
2020	2019	2018	2020	2019	2018	2020	2019	2018	2020	2019	2018
6.2	6.4	6.1	6.4	6.5	6.2	5.7	6.5	6.3	6.2	5.9	5.8

Over the next 12 months, to what degree do you believe your organization will experience challenges to sustaining and/or strengthening the coordination and exchange of risk information among senior management, front-line business unit and process owners, second-line risk management leaders, and relevant subject-matter experts within the organization?	2020	2019
Full Sample	5.9	6.2
Publicly Traded Companies	6.0	6.2
Privately Held For-Profit Enterprises	5.4	6.3
Not-for-Profit and Governmental Organizations	6.3	6.0

Interestingly, board members and all of the C-suite executives, except for CAEs, signal that their organizations are less likely to invest additional resources in risk management over the next 12 months relative to the prior year. Board respondents exhibited the largest year-over-year drop, falling from 7.1 in 2019 to 6.3 in 2020. However, 6.3 still represents the third highest response across positions we examine, behind only CIOs/CTOs (6.7) and Other C-Suite executives (6.6). The CAEs in our sample actually express a stronger likelihood of additional investment in risk management processes, rising from 5.6 in 2019 to 6.1 in 2020.

Likelihood that the organization plans to devote additional resources to risk management over the next 12 months																							
Full Sample			**Board Members**			**CEOs**			**CFOs**			**CROs**			**CAEs**			**CIO/CTOs**			**Other C-Suite**		
2020	**2019**	**2018**	**2020**	**2019**	**2018**	**2020**	**2019**	**2018**	**2020**	**2019**	**2018**	**2020**	**2019**	**2018**	**2020**	**2019**	**2018**	**2020**	**2019**	**2018**	**2020**	**2019**	**2018**
6.2	6.4	6.1	6.3	7.1	6.3	5.5	6.2	5.9	6.2	6.5	6.3	6.0	6.2	5.8	6.1	5.6	6.1	6.7	7.0	6.5	6.6	7.0	6.4

In addition, board members and CFOs sense the greatest level of challenges in sustaining and strengthening the coordination and exchange of risk information among senior executives, with the latter and CROs showing an uptick in this rating.

Over the next 12 months, to what degree do you believe your organization will experience challenges to sustaining and/or strengthening the coordination and exchange of risk information among senior management, front-line business unit and process owners, second-line risk management leaders, and relevant subject-matter experts within the organization?	**2020**	**2019**
Full Sample	5.9	6.2
Board Members	6.1	6.5
CEOs	4.9	5.9
CFOs	6.1	5.8
CROs	5.8	5.7
CAEs	5.8	6.2
CIOs/CTOs	5.9	6.7
Other C-Suite	5.6	6.8

Recall that for the past two years, we had a sufficient number of respondents from different parts of the world to perform separate analysis across eight different regions around the globe. As a result, we are only able to show responses for all three years for respondents in North America, Europe and Africa, as shown in the table below.

Organizations with headquarters based in Australia/New Zealand and Latin America indicate the greatest likelihood that they will devote additional resources to risk management over the next 12 months. Organizations based in India, the Middle East and Africa reflect the smallest level of likelihood for that kind of investment in risk management, with perceptions in India changing most dramatically (falling from 7.1 in 2019 to 5.9 in 2020).

Likelihood that the organization plans to devote additional resources to risk management over the next twelve months	2020	2019	2018
Full Sample	6.2	6.4	6.1
North America	6.2	5.8	5.9
Europe	6.0	6.7	6.4
Australia/New Zealand	6.5	7.0	N/A
Asia	6.3	6.9	N/A
Latin America	6.8	7.2	N/A
Middle East	5.9	6.6	N/A
India	5.9	7.1	N/A
Africa	5.9	5.7	6.5

Organizations based in Latin America, Europe and Asia seem to face the greatest level of challenges in sustaining and strengthening the coordination and exchange of risk information among senior management.

Over the next 12 months, to what degree do you believe your organization will experience challenges to sustaining and/or strengthening the coordination and exchange of risk information among senior management, front-line business unit and process owners, second-line risk management leaders, and relevant subject-matter experts within the organization	2020	2019
Full Sample	5.9	6.2
North America	5.7	5.6
Europe	6.1	6.5
Australia/New Zealand	6.0	6.6
Asia	6.1	6.8
Latin America	6.5	7.0
Middle East	5.7	6.7
India	5.8	6.9
Africa	5.3	5.4

"Our survey indicates reduced concerns regarding challenges to sustaining and strengthening the coordination and exchange of risk information with decision-makers up, down and across the organization. This sharing is vital to an effective risk-informed approach."

Dolores Atallo, Managing Director, Protiviti

A Call to Action: Questions to Consider

This report provides insights from 1,063 board members and executives about risks that are likely to affect their organizations over the next 12 months. Overall, most rate the business environment as less risky, and on an overall basis, respondents rated 26 of the 29 risks included in prior year surveys as lower in 2020 relative to 2019, but at a higher level than 2018 (recall we added one new risk in 2020).

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 emerging risks. Unfortunately, some organizations continue to manage risks the way they have for many years, even though the profile of risks is changing as business is transformed in the digital economy. 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 company to their own devices. Soon those organizations may realize, once it's too late, that the level of investment in risk management and their willingness to engage in robust tools are inadequate.

Now may be the time for boards and C-suites to closely examine how their organization approaches risk management and oversight in the digital age to pinpoint aspects requiring significant improvement. Managing today's risks using outdated techniques and tools may leave the organization exposed to significant, undesirable risk events that could threaten its brand and reputation, and even its very survival.

> "The world is changing such that taking risk means much more than introducing new products and entering new markets. It entails becoming more innovative in re-imagining processes, disrupting business models and even re-inventing the organization itself. That is why in the digital age, enterprise risk management has an important role to play in strengthening and nurturing the appropriate risk culture that facilitates the initiative, creativity, innovation and digital thinking so critical to success."
>
> Jim DeLoach, Managing Director, Protiviti

Accordingly, in the interest of evaluating and improving the risk assessment process 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 process:

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 or is the board relatively uninterested in advancing the organization's risk management processes?
- 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 posted by the risk management function or internal audit 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 different 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?

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 are staying abreast of emerging issues:

- Is the process supported by an effective, robust methodology that is definable, repeatable and understood by key stakeholders?
  - To what extent is our risk management process mostly focused on internal, operational types of risks using a bottom-up approach to risk identification?
  - How extensively 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 moves?
  - Would most stakeholders describe our approach to risk management as one that is siloed across disparate functions in the organization and/or one that is more ad hoc than structured?
  - 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?
  - Do we engage all the right stakeholders in the risk identification process?
  - How often are we engaging in a formal or

an informal risk assessment process? Is it frequent enough?

  — 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 the 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 risk trends?

Evaluate whether our risk focus is sufficiently comprehensive

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 strategy, business objectives and operations? To what extent is the output about top risks identified by the organization's risk management process serving as a critical input to the strategic planning process?
- Does the process consider a sufficient time horizon to pick up strategic risks, 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?
- Do we consider the effects of changes in internal operations, personnel, processes, technologies, suppliers and third-party vendors in our ongoing assessment of risk?
- Does the process consider extreme as well as plausible scenarios?
- Are we encouraging the identification of opportunities to take on more risk on a managed basis?

Clarify accountabilities for managing risks

Following completion of a formal or informal risk assessment:

- Are risk owners assigned for newly identified 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?
- Is there an effort to source the root causes of certain risks that warrant a better understanding? Does the 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 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?

- 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 the organization operates 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 executed?
- 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?

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 2020 provided in this report 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.

TABLE OF CONTENTS

Research Team

This research project was conducted in partnership between Protiviti and NC State University's Enterprise Risk Management Initiative. Individuals participating in this project include:

NC State University's ERM Initiative

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- Bruce Branson
- Don Pagach

Protiviti

- Pat Scott
- Brian Christensen
- Jim DeLoach
- Dolores Atallo
- Emma Marcandalli
- Matthew Moore
- Kevin Donahue
- Antonia Wynn

We also would like to thank the **Nedcommunity,** an organization of non-executive independent directors, and the **Associazione Italiana Internal Auditors** for their efforts in inviting board members and C-suite executives in Italy to participate in our study.

About Protiviti

Protiviti 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 independently owned Member Firms provide consulting solutions in finance, technology, operations, data, analytics, governance, risk and internal audit to our clients through our network of more than 75 offices in over 20 countries.

We have served more than 60% of *Fortune* 1000® and 35% of *Fortune* Global 500® companies. We also work 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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