NC STATE Poole College of Management
Enterprise Risk Management Initiative

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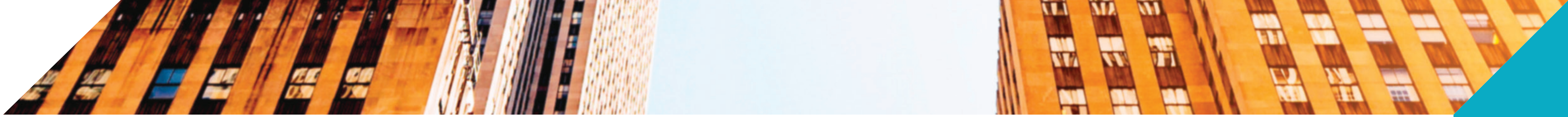
EXECUTIVE PERSPECTIVES ON TOP RISKS 2019

Research Conducted by North Carolina State University's ERM Initiative and Protiviti

Key issues being discussed in the boardroom and C-suite

Executive Summary



Introduction

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. Escalating concerns about the rapidly changing business environment and the potential for unwelcome surprises vividly illustrate the reality that organizations of all types face risks that can disrupt their business model over time and damage reputation almost overnight. The constantly evolving geopolitical landscape that is trending toward nationalism, ever-present concern of cyber disruptions, increasing market disruptions caused by born-digital organizations, effects of tightening labor markets, devastating impact of hurricanes and other natural disasters, volatility in energy prices, recurring shocks of terrorism around the globe, polarization of political viewpoints, the upward trajectory of interest rates, ease with which information can go viral via social media and other digital platforms, and ongoing negotiations to settle Brexit are a few of the drivers of uncertainty affecting the 2019 global business outlook. Insufficient focus on and attention to the web of complex enterprisewide risk events of varying velocity are likely to threaten an entity's brand, reputation, business model and, in some instances, its very survival. 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 North Carolina 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 seventh annual risk survey of directors and executives 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 2019 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] Two new risks were included in the 2019 survey. They replaced two risks we asked about in prior years. See Table 1 for a list of the 30 risks addressed in this study.

This executive summary provides a brief description of our methodology and an overview of the overall risk concerns for 2019, followed by a review of the results by type of executive position. It concludes with a call to action offering a discussion of questions executives may want to consider as they look to strengthen their overall risk assessment and management processes.

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

> "Looking forward, the message is that digital transformation is a main driver of risk impacting uncertainty over business model viability, customer preferences, the competitive landscape, workplace dynamics and the war for talent, and even regulatory demands. Clearly, organizations must align their culture, people, processes and intelligence gathering to embrace this rapidly changing business environment.
>
> — Pat Scott, Executive Vice President, Global Industry Program, Protiviti

About the Survey

We surveyed 825 board members and executives across a number of industries and from around the globe, asking them to assess the impact of 30 unique risks on their organization over the next 12 months. They rated the impact of each risk on their organization using a 10-point scale, where 1 reflects "No Impact at All" and 10 reflects "Extensive Impact." For each of the 30 risks, we computed the average score reported by all respondents and rank-ordered the risks from highest to lowest impact. We also grouped risks based on their average into one of three classifications:

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

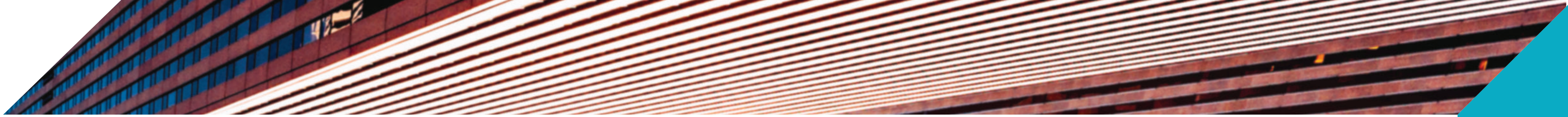
With regard to the respondents, we targeted our survey to individuals currently serving on the board of directors or in senior executive positions so that we could capture C-suite and board perspectives about risks on the horizon for 2019. Respondents to the survey serve in a number of different board and executive positions.

EXECUTIVE POSITION	NUMBER OF RESPONDENTS
Board of Directors	90
Chief Executive Officer	47
Chief Financial Officer	35
Chief Risk Officer	210
Chief Audit Executive	192
Chief Information/Technology Officer	55
Other C-Suite[2]	100
All other[3]	96
Total Number of Respondents	**825**

In our full report (available online at **erm.ncsu.edu** and **protiviti.com/toprisks**), we analyze variances across different sizes and types of organizations, industry and respondent position, in addition to differences among organizations based in North America, Europe, Australia/New Zealand, Asia, Latin America/South America, India, Africa and the Middle East. Page 27 provides more details about our methodology. This executive summary highlights our key findings.

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

[3] These 96 respondents either did not provide a response or are best described as middle management or business advisers/consultants. We do not provide a separate analysis for this category.



Executive Summary

Shifting cultural norms and expectations of accountability. Disruptive business models. Innovations triggered by emerging technologies. Changes in the geopolitical landscape. Negotiations surrounding Brexit. 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.

Expectations of key stakeholders regarding the need for greater transparency about the nature and magnitude of risks undertaken in executing an organization's corporate strategy continue to be high. Pressures from boards, volatile markets, intensifying competition, demanding 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 2019

1. Existing operations meeting performance expectations, competing against "born digital" firms
2. Succession challenges and ability to attract and retain top talent
3. Regulatory changes and regulatory scrutiny
4. Cyber threats
5. Resistance to change operations
6. Rapid speed of disruptive innovations and new technologies
7. Privacy/identity management and information security
8. Inability to utilize analytics and big data
9. Organization's culture may not sufficiently encourage timely identification and escalation of risk issues
10. Sustaining customer loyalty and retention

KEY FINDINGS

01

Global business environment riskier in 2019 — Survey respondents indicate that the overall global business context is somewhat riskier in 2019 relative to the two prior years. Our prior year survey respondents only rated seven of the top 10 risks higher for 2018 relative to 2017; however, for 2019, respondents rated all of the top 10 risks higher for 2019 relative to 2018. A majority of respondents rated each of the top 10 risks as a "Significant Impact" risk, and eight of our top 10 risks had 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. Likewise, risk levels for nine of the top 10 risks in 2019 were higher than 2017. This suggests a potential shift in views about the riskiness of 2019 relative to the last two years.

02

Nature of uncertainty concerns varies across the world — These overarching views about uncertainty in the business environment seem to be global in reach, with respondents from six of the eight geographic regions of the world we examined agreeing that the overall magnitude and severity of risks are of a "Significant Impact" level for 2019. Except for North America-based organizations, respondents representing organizations in all other regions rate their top five risks at the "Significant Impact" level; in contrast, organizations in North America only rate two of their top five risks at that level. Organizations in Latin America/South America and in India indicate the highest level of concern about the magnitude and severity of risks for 2019.

03

Firms more likely to invest in risk management — Interestingly, respondents indicate that they are more 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, suggesting a greater desire to invest in strengthening risk management efforts. This is especially true for financial services organizations as well as the largest organizations (revenues greater than $10 billion) in our sample. Individuals serving on boards indicate the greatest desire to devote additional time or resources to risk management, perhaps to better inform their risk oversight processes. The overall reality of the riskiness of the global business environment continues to motivate boards and executives to renew their focus on effective risk oversight.

04

Notable shifts in the 2019 top 10 risks — There are noticeable shifts in what constitutes the top 10 risks for 2019 relative to last year. One risk jumped from the tenth position in the top 10 risks in 2018 to the number one spot for 2019: Concerns that existing operations and legacy IT infrastructure may not be able to meet performance expectations as well as competitors that are "born digital." Respondents in five of the six industry groups we examined selected that risk as a top five risk concern, and they rated it as a "Significant Impact" risk concern for 2019. One risk returned to the top 10 in 2019 after dropping off in the prior year. Respondents indicated their concerns about the increasing difficulty their organizations face in sustaining customer loyalty and retention in light of evolving customer preferences and demographic shifts in their customer base. This risk had appeared in the top 10 in our 2015, 2016 and 2017 reports. As in the prior year, seven of the top 10 risks represent operational risk concerns, while the remaining three top 10 risks represent strategic risk concerns. None of the macroeconomic risk concerns made the top 10 list of risks for 2019 for the overall sample.

05

Regulatory concerns persist, economic concerns vary across the globe — Interestingly, respondents (particularly in Europe) remain troubled over the threat of regulatory change and increased scrutiny, which has been a top 10 risk all seven years we have conducted this survey. But, for the first time, concerns about economic conditions fell out of the top 10 list of risks for 2019 for the overall survey. Despite that finding for the overall sample, respondents in Europe, Latin America/South America, the Middle East and Africa did include economic concerns as a top five risk concern for 2019. Perceptions of economic risks are like a swinging pendulum as perceptions can change quickly over a short period of time as new developments transpire (including after our survey period).

With respect to the top five risks overall:

- **Existing operations and infrastructure unable to adjust to competitors "born digital" —** Overall, the top concern among respondents for 2019 relates to the ability of their organization — relative to their competitors — to adjust existing operations 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. This concern may be a composite of several significant uncertainties — the company's 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 leery of "born digital" players that can alter the game by operating more efficiently, digitizing new products and services, enhancing the customer experience, and/or transforming the business model. This risk was a concern for all four size categories of organizations in our sample, except for the smallest organizations. For most large 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.

On page 23 of this executive summary, we pose key questions as a call to action for board members and executive management to consider that can serve as a diagnostic to evaluate and improve their organization's risk assessment process.

- **Succession challenges and talent acquisition and retention —** The risk of succession challenges and the ability to attract and retain talent moved into the top five list of risks for 2019, likely triggered by a continued tightening labor market as unemployment in the United States hit the lowest jobless rate since 1969, as well as the growing gig economy. 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. What's at stake is sustaining the workforce with the requisite talent and skills needed to think out of the box in a rapidly changing digital marketplace, execute high-performance business models, and implement increasingly demanding growth strategies. The flip side is that talented people aspire to be a contributor in a contemporary, dynamic, digitally focused business with its best days ahead of it, rather than to be bound to a more mature company that is not capably structured to be innovative and dynamic even though it may have a strategy that asserts it will be. Respondents continue to perceive that significant operational challenges may arise if organizations are unable to sustain a workforce with the skills needed to implement their growth strategies.
- **Regulatory change and heightened regulatory scrutiny —** This risk continues to represent a major source of uncertainty among the majority of organizations. Sixty-nine percent of our respondents rated this risk as a "Significant Impact" risk. This risk dropped to the fourth risk in 2018 after having been in our top two risk concerns all prior years we have conducted this survey. However, concerns about regulatory change and increased regulatory scrutiny moved up one position for 2019, suggesting that respondents remain concerned about potential regulatory influences disrupting how they do business. While declining in significance in North America, regulatory concerns were rated a top five risk in both Europe and Asia Pacific (Asia and Australia/New Zealand). Perhaps the uncertainties over Brexit were top of mind for respondents from Europe. Political gridlock and checks and balances remaining present in governing institutions continue to be on the minds of respondents.
- **Managing cyber threats —** Threats related to cybersecurity are of major concern as respondents focus on how such events might interrupt core operations. It is no surprise that this risk continues to be one of the most significant operational risks overall and it is a top five risk for each of the four size categories of

organizations, except for the very largest organizations, as well as for four of the six industry groups we examine. There are two categories of companies — those that have been breached and know it and those that have been breached but don't know it yet. Cybersecurity is a moving target as innovative digital transformation initiatives, cloud computing adoption, mobile device usage, machine learning and other applications of exponential increases in computing power continue to outpace the security protections companies have in place. Increasingly sophisticated attacks on the human perimeter by perpetrators of cybercrime add to the uncertainty.

- **Resistance to change —** Enabling change continues to be a significant priority for just about every organization on the planet, for 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 lethal. 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 and IT infrastructure to compete with more nimble competitors, respondents also highlighted a cultural concern related to overall resistance to change within their organizations. As major business model disruptors emerge, respondents are growing even more focused on the 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.

Other notable findings include the following:

- **Executives have differing views about the magnitude and severity of risks expected in the coming year —** There is variation in views among boards and C-suite executives regarding the magnitude and severity of risks for 2019 relative to prior years. Interestingly, board members report the highest overall score about their impression regarding the magnitude and severity of risk for 2019 relative to CEOs, CFOs and CROs. Out of the 30 risks examined, board members rate 26 of the 30 risks as "Significant Impact" risks. In contrast, CEOs only rated six of the 30 risks at that level. So board members seem to be substantially more concerned about risks than the C-suite. However, when comparing overall scores for magnitude and severity of risks for 2019 to 2018, the most noticeable increase in risk scores among specific executive groups (other than the "Other C-Suite" group) was for CEOs, suggesting that CEOs perceive a noticeable upward shift in risks for 2019 relative to 2018. In fact, in the prior year, CEOs did not rate any of the 30 risks as "Significant Impact" risks, while for 2019 they rated six of 30 risks at that level. These findings suggest 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.

- **Boards perceive a much riskier environment —** Surprisingly, board members, CEOs, chief risk officers, and other individuals in C-suite positions perceive that the magnitude and severity of risks may be higher for 2019 relative to

> Risks associated with heightened regulatory oversight and new limits on how organizations may conduct business have been front-of-mind in all seven years we have conducted this survey, never falling below the fourth highest-ranked risk. We have no doubt this will continue as we observe significant changes in governmental leadership around the globe.
>
> — Mark Beasley, Professor of Enterprise Risk Management and Director of the ERM Initiative, Poole College of Management, NC State University

2018. Only CFOs, chief audit executives and chief information/technology officers sense a slightly less risky business environment for 2019 in comparison to prior years. These findings suggest that there are noticeable differences in viewpoints among board members and C-suite executives about the nature of the overall risk environment and the need to invest more time and resources in risk management for 2019. What is most striking is that board members are much more concerned about the overall magnitude and severity of risks relative to senior management. Board members ranked 26 of the 30 risks as "Significant Impact" risks. In contrast, CEOs ranked only six of the 30 risks at that level, while CFOs only ranked five at that level. These differences are more pronounced than in our prior year results. The top five risk concerns of board members and individuals representing the various C-suite positions are all "Significant Impact" risks. This contrasts with 2018, when none of the top five risks of CEOs were "Significant Impact" risks.

- **Most industries sense a heightened risk concern for 2019 —** Our sub-analyses of results across six different industry groups finds that every group, with the exception of the Technology, Media and Telecommunications industry group, perceived that the magnitude and severity of risks affecting their organizations are greater in 2019 than in the prior year. The Healthcare and Life Sciences industry group reflects the highest overall concern related to the magnitude and severity of risks. Not surprisingly, cyber risk is rated as a "Significant Impact" risk concern across all six industry groups we examined. That risk is the only one of the 30 risks identified at that level for all industries. All of the top five risks increased over 2018 for each of the industry groups, with the exception of two of the top five risks for the Energy and Utilities industry group and one of the top five risks for the Technology, Media and Telecommunications industry group.

- **Dominance of concern about operational capabilities —** Respondents are noticeably focused on risks related to their organization's infrastructure and core operations. Advancements in technologies, the ability for organizations that were "born digital" to quickly adjust to market conditions faster than larger, more established organizations, and threats to their IT systems and concerns about ensuring the privacy of data in those systems are creating challenges for organizational leaders to manage. Seven of the top 10 risks for the full sample reflect operational risks, with the remaining three risks related to strategic risk concerns. The dominance of concern related to the capabilities of the operations, systems, personnel and infrastructure from within the organization is overshadowing risks on the horizon driven by external factors. While the strength of the overall economy is fueling growth, in some organizations that growth may be outpacing the entity's investment in strengthening core operations. These concerns are consistent across all four size categories of organizations we examined. In fact, in all size categories except the very largest organizations, four of the top five risk issues reflect operational risk concerns. For the very largest organizations, three of the top five risk concerns are of an operational risk nature.
- **Risks vary noticeably across different regions of the world —** While organizations operate in a global business environment, the risks that they may face can differ widely across different geographic regions. This year we are able to analyze the results across eight different regions of the world. That analysis finds that the nature of risks varies significantly depending on geography. Respondents in Latin America/South America and in India-based operations rated the magnitude and severity of risks for 2019 at the highest levels. And, the nature of risks differs across the regions, with five of the eight regions mostly concerned about operational risks, while the remaining three regions are most concerned about macroeconomic risks. In particular, respondents in Europe, Latin America/South America, the Middle East and Africa rated risks related to economic conditions in the top five list of risks. As organizations explore doing business in different parts of the globe, it will be important for them to understand how risks may differ depending on where those operations are based.

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 executive summary provides insights for 2019 from 825 respondents in C-suite and board positions in organizations around the globe.

The list of top 10 global risks for 2019, along with their corresponding 2018 and 2017 scores, appears in Figure 1 on the following page.

Top 10 Risks for 2019

FIGURE 1

Our existing operations and legacy IT infrastructure may not be able to 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

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

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

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

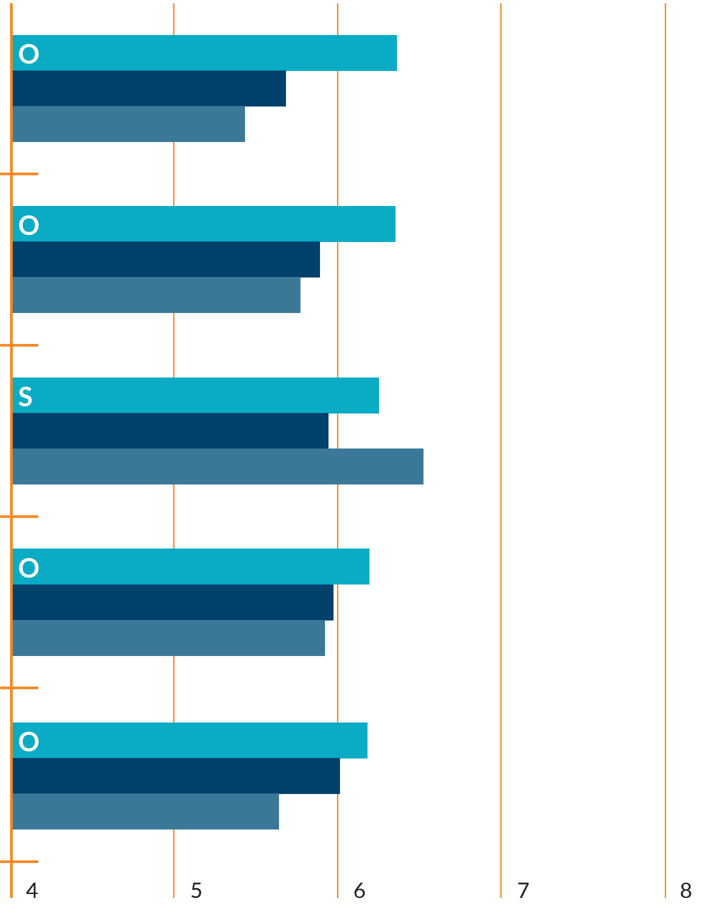


FIGURE 1 (CONTINUED)

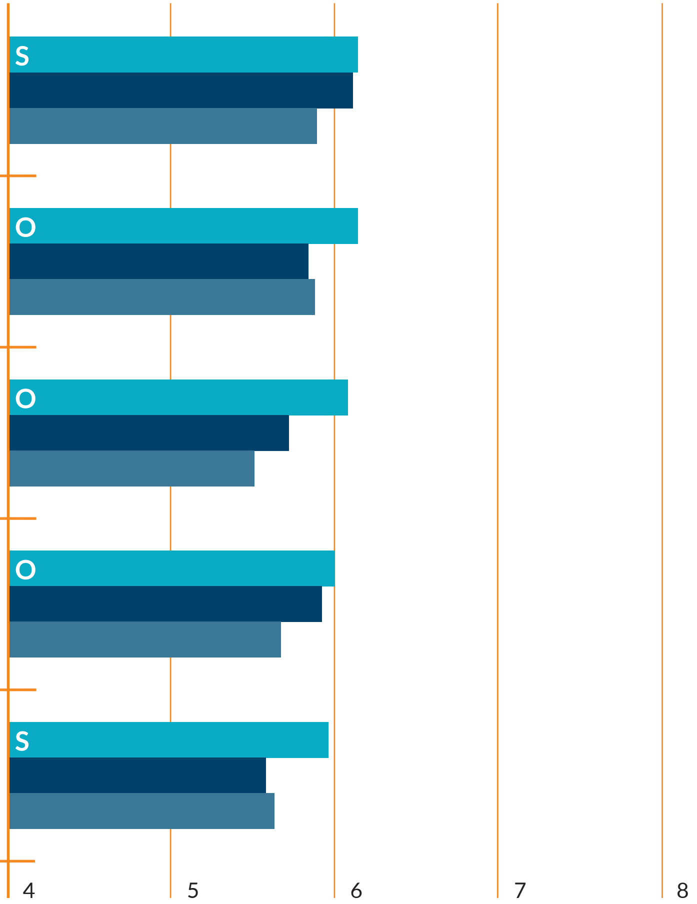
Rapid speed of disruptive innovations enabled by new and emerging technologies and/or other market forces may outpace our organization’s ability to compete and/or manage the risk appropriately, without making significant changes to our business model

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

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

Sustaining customer loyalty and retention may be increasingly difficult due to evolving customer preferences and/or demographic shifts in our existing customer base



Legend

M Macroeconomic Risk Issue | S Strategic Risk Issue | O Operational Risk Issue | 2019 | 2018 | 2017

In addition to our Key Findings, other notable findings this year regarding those risks making the top 10 include the following:

- **Rapid speed of disruptive innovation —** This strategic risk soared to the top for 2018 and it remains a top 10 concern for 2019. Sixty-eight percent of our respondents rated this risk as a "Significant Impact" risk for 2019. This top risk reflects respondent concerns regarding the specter of disruptive innovation or new technologies outpacing an organization's ability to keep up and remain competitive. With advancements in digital technologies and rapidly changing business models, respondents are focused on whether their organizations are agile enough to respond to sudden developments that alter customer expectations and change their core business model. This risk is especially a concern for board members, CEOs and CROs, with these groups of respondents rating it as a top five risk concern.
- **Privacy and identity management —** Concerns related to privacy and identity protection continue to be among the top 10 risk concerns for 2019. The presence of this risk in the top 10 is somewhat expected given the increasing number of reports of hacking and other forms of cyber intrusion that compromise sensitive customer and personal information. Two-thirds of our respondents rated this risk as "Significant Impact" for their organization. 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, that 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 and identity theft present themselves.
- **Inability to use big data and data analytics —** There is continued concern among respondents about their ability to utilize data analytics and big data to achieve competitive advantage and to manage operations and strategic plans. They sense that other organizations may be able to capture intelligence that allows them to be nimbler and more responsive to market shifts and changing customer preferences. In the digital age, knowledge wins and advanced analytics is the key to unlocking the gate to insights that can differentiate in the market.
- **Culture may not encourage timely escalation of risk issues —** Interestingly, 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 then. Sixty-five percent of respondents rated this risk as a "Significant Impact" risk. The effectiveness of formal and ad hoc upward communications processes is of vital importance to keeping an organization's leaders in touch with business realities. Coupled with concerns over resistance to change, the presence of this risk reflects on the state of the organization's culture.

- **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 made the top 10 list of risks for 2019 after dropping out of the top 10 in 2018. 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. 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 delivery services is shocking many of the traditional forms of customer interactions. If organizations cannot adjust their operations and legacy IT infrastructures (see risk #1 in the top 10 list), they may not meet the expectations of their core customers in a manner sufficient to retain their loyalty.

In addition to our analysis of the top 10 risk results for the full sample, we conducted a number of sub-analyses to pinpoint other trends and key differences among respondents. Further insights about the overall risk environment for 2019 can be gleaned from these analyses, which we highlight in a number of charts and tables in our full report. Following are some additional significant findings:

- **Less concern about macroeconomic risk issues for most, but with some exceptions —** Interestingly, respondents are not as concerned about economic conditions in domestic and international markets relative to prior years. In the six prior years we have conducted this study, economic concerns were rated high, placing this risk near or at the top of our top 10 risks in most years. Last year, economic concern dropped several positions and for 2019 that concern did not make the top 10 list of risks overall. In fact, no macroeconomic risk made the overall top 10 list of risks for 2019 and no

> "Often overlooked as success factors, risk management and regulatory compliance are intended to drive growth and act as enablers of business strategy. When implemented correctly, they create not only greater confidence, but also greater speed to value.
>
> — Matthew Moore, Managing Director, Protiviti

macroeconomic risk made the top five risk concerns for each of the four organization size categories we examine. This suggests that respondents seem more positive about macroeconomic issues for 2019 relative to the past several years. However, it is important to note that concerns about the economy are in the top five list of risks for certain regions of the world, including Europe, Latin America/South America, the Middle East and Africa.

- **Risks differ widely depending on region of the world —** In addition to receiving 371 responses from individuals in organizations headquartered in North America, this year we were fortunate to also receive 454 responses from individuals in other parts of the world. This allows us to provide more detailed analyses of responses across different regions of the world than we have been able to do in prior year surveys. This year we provide a detailed breakdown of the results across eight different geographic regions. It is interesting to note the differences in viewpoints about risks for 2019 between organizations located in North America and those from the rest of the world. For North American respondents, only two of their top five risks were rated as "Significant Impact" risks for 2019; however, for every other region of the world, all of the top five risks in each region were rated as "Significant Impact" risks. Similarly, when asked about their views regarding the overall magnitude and severity of risks for 2019, respondents from organizations located in North America had the lowest score (tied with respondents from Africa). Respondents from Latin America/South America and India had the highest concern about the magnitude and severity of risks for 2019. There are some consistencies in risk concerns across certain regions of the world. For example, respondents in North America, Europe, Australia/New Zealand and Asia are all concerned about their organizations' existing operations and legacy IT infrastructure, succession and talent acquisition/retention challenges, and exposure to regulatory change. In contrast, respondents in the Middle East and India are concerned about geopolitical shifts and instability in governmental regimes. Those same respondents, in addition to those from organizations in Africa, selected macroeconomic risk concerns as the majority of their top five risk issues for 2019.

- **Most risks are higher for 2019 —** We added two new risks to our list of 30 risks for 2019. Out of the 28 risks that we also examined in the prior year, all but three of the risks increased in score for 2019 relative to 2018. Three of the top five risks with the greatest increase in risk ratings from 2018 relate to operational risk concerns. Interestingly, two of those risks made the top 10 list of risks — concerns about existing operations and legacy IT infrastructure and concerns about succession and talent acquisition/retention challenges. While concern over risks related to outsourcing and other forms of joint ventures and partnerships did not make the top 10 list of risks, that concern increased noticeably for 2019 from 2018 — indicating that this is a risk that is being watched more closely.

- **Concerns about ease of entrance of new competitors and shifts in consumer preferences affect most organizations —** All organizations signaled an increased concern about the ease of entrance of new competitors into the industry and marketplace for 2019. With advancements in technologies enabling improved operational efficiencies and the hyperscalability of business models to accommodate rapid growth, there are opportunities for organizations to enter new markets like never before. For example, new entrants can leverage technology in ways that avoid the costly investments in physical infrastructures that have traditionally provided the platform for offering products and services. Respondents are also increasingly concerned about their ability to identify and respond to unexpected shifts in social, environmental and other customer preferences. For certain demographic shifts, such as an aging population and increased urbanization, organizations are concerned that they may not recognize those and other shifts on a timely basis, or they are concerned that their existing business models may not be sustainable under new conditions.

- **Boards see risks differently than the C-suite —** Board members are most concerned about the ease of entrance of competitors into the industry and marketplace. That represents their number one risk concern. None of the C-suite executives identified that as a top five risk concern for 2019. Board members are also concerned about the potential for increased regulatory scrutiny and change, while that did not make the top five list of risks for CEOs or CFOs. Of particular interest, they are concerned about economic conditions, as are CEOs. Respondents in most of the other C-suite positions did not include that concern as a top five risk issue, except for chief information/technology officers. These differences in views highlight the critical importance of boards and senior management engaging in robust conversations about the critical enterprise risks and emerging risks. It also suggests that board members may not be as fully engaged as management with the digital revolution and its implications to the companies they serve, creating greater uncertainty on their part with respect to these issues.

- **Bigger organizations perceive greater uncertainty —** The three largest size categories of organizations rated all of their top five risks as "Significant Impact" risks for 2019. The smallest organizations (those with revenues under $100 million) rated only one of their top five risks as "Significant Impact." Thus, the environment for most organizations appears to be risky, even though respondents from smaller organizations do not sense the same overall level of risk concern. Unease over operational risks is common among all sizes of organizations (although the specific operational risks differ), and concerns about those risks are generally higher for 2019 relative to 2018. These findings emphasize the reality that there is no "one size fits all" list of risk exposures across all organizations, warranting a careful assessment by each organization of its risk profile.

- **For-profit entities view risks differently than not-for-profit and governmental organizations —** Succession challenges and the ability to attract and retain talent is a top five risk concern for all types of organizational structures — publicly traded companies; private, for-profit

> In the digital economy, enterprise risk management can be a real difference maker if it contributes to reshaping strategy in advance of disruptive change. When the fundamentals of the business are about to change, executive management must be positioned to secure "early mover" positioning in the marketplace to capitalize on market opportunities and emerging risks.
>
> — Jim DeLoach, Managing Director, Protiviti

entities; and non-profit organizations. For-profit entities — both publicly traded and privately held — are concerned about limitations they may face due to their existing operations and legacy IT infrastructure, changes in regulatory scrutiny, and the potential for disruptive innovations to rapidly emerge and disrupt their business models and core operations. Non-profit and governmental organizations face a different set of top risk issues. They are particularly concerned about an internal culture that may be resistant to change as well as about protecting the privacy and identity of sensitive information they possess within their organizations.

The full report on this study (available online at **erm.ncsu.edu** and **protiviti.com/toprisks**) includes our in-depth analysis of perceptions about specific risk concerns. We identify and discuss variances in the responses when viewed by organization size, ownership type, industry and geography, as well as by respondent role. In addition, on page 23 of this executive summary, we pose key questions as a call to action for board members and executive management to consider that can serve as a diagnostic to evaluate and improve their organization's risk assessment and management process.

Our plan is to continue conducting this risk survey periodically so we can stay abreast of key risk issues on the minds of executives and observe trends in risk concerns over time.

Perceived Impact for 2019 — by Role

TABLE 1

Legend

● Significant Impact — Rating of 6.0 or higher ● Potential Impact — Rating of 4.5 — 5.99 ● Less Significant Impact — Rating of 4.49 or lower

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	Significant	Significant	Potential	Potential	Potential	Significant	Significant
Anticipated increases in labor costs may affect our opportunity to meet profitability targets	Significant	Potential	Significant	Potential	Potential	Significant	Significant
Unexpected change in the current interest rate environment may have a significant effect on the organization's operations	Significant	Potential	Potential	Potential	Potential	Significant	Significant
Our ability to access sufficient capital/liquidity may restrict growth opportunities for our organization	Significant	Potential	Potential	Potential	Potential	Potential	Significant
Anticipated volatility in global financial markets and currency exchange rates may create significantly challenging issues for our organization to address	Potential	Potential	Potential	Potential	Potential	Potential	Significant
Geopolitical shifts and instability in governmental regimes or expansion of global terrorism may restrict the achievement of our global growth and profitability objectives	Significant	Potential	Potential	Potential	Potential	Potential	Significant
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	Potential	Potential	Potential	Less Significant	Potential	Significant	Potential
Demands made by activist investors and other key stakeholders may significantly affect how we do business in the marketplace (new in 2019)	Potential	Potential	Potential	Potential	Less Significant	Potential	Significant
Evolving changes in global trade policies may limit our ability to operate effectively and efficiently in international markets	Potential	Potential	Potential	Less Significant	Potential	Potential	Potential

STRATEGIC RISK ISSUES	Board	CEO	CFO	CRO	CAE	CIO/ CTO	Other C-Suite
Rapid speed of disruptive innovations enabled by new and emerging technologies 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	🔴	🔴	🟡	🔴	🟡	🔴	🔴
Sustaining customer loyalty and retention may be increasingly difficult due to evolving customer preferences and/or demographic shifts in our existing customer base	🔴	🔴	🟡	🔴	🟡	🔴	🔴
Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered	🔴	🟡	🟡	🔴	🟡	🔴	🔴
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	🔴	🟡	🟡	🟡	🟡	🔴	🔴
Our organization may not be sufficiently prepared to manage an unexpected crisis significantly impacting our reputation	🔴	🟡	🟡	🟡	🟡	🔴	🔴
Opportunities for organic growth through customer acquisition and/or enhancement may be significantly limited for our organization	🔴	🟡	🟡	🟡	🟡	🔴	🔴
Shifts in environmental, social and governance (ESG) preferences as well as expectations of key stakeholders 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	🔴	🟡	🟡	🟡	🟡	🟡	🔴

TABLE 1 (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	🔴	🟡	🟡	🟡	🟡	🟡	🔴
Growth through acquisitions, joint ventures and other partnership activities may be difficult to identify and implement	🔴	🟡	🟡	🟡	🟡	🟡	🟡
Performance vulnerabilities may trigger shareholder activism against our organization that may significantly impact our organization's strategic plan and vision	🔴	🟡	🟡	🟢	🟢	🟡	🔴

OPERATIONAL RISK ISSUES	Board	CEO	CFO	CRO	CAE	CIO/ CTO	Other C-Suite
Our organization's succession challenges and ability to attract and retain top talent in a tightening talent market may limit our ability to achieve operational targets	🔴	🔴	🔴	🔴	🔴	🔴	🔴
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 existing operations and legacy IT infrastructure may not be able to 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 1 (CONTINUED)

OPERATIONAL RISK ISSUES (CONTINUED)	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	●	○	●	●	●	●	●
Ensuring privacy/identity management and information security/system protection may require significant resources for us	●	○	○	●	●	●	●
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	●	●	○	○	○	●	●
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 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	●	○	○	○	○	●	●
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 cultural behaviors and personal interactions with others exhibited by the organization's management team and other key representatives — as manifested through day-to-day decision-making, attitudes and conduct — may not be aligned with the long-term interests of shareholders, the board's risk appetite, compliance with laws and regulations, and/or the core values most accepted and rewarded by the marketplace (new in 2019)	●	○	○	○	○	○	○

A Call to Action: Questions to Consider

This report provides insights from 825 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 significantly risky, and on an overall basis, respondents rated 25 of the 28 risks included in prior year surveys as higher in 2019 relative to 2018, suggesting that there continues to be a number of uncertainties in the marketplace for 2019.

The ever-changing risk landscape and the overall perceived increase in the 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, many organizations continue to manage risks the way they have for many years, even though the profile of risks is changing as the way business is conducted evolves. Their risk profile is most certainly not yesterday's risks, and a focus on financial and compliance risks using static analog age tools and without any conception of the organization's risk appetite leaves decision makers to their own devices. Soon those organizations may realize, once it's too late, that the level of investment in risk thinking and their willingness to engage in robust risk management tools and dialogue is inadequate. Now is 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.

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 process:

Assess impact of leadership and culture on risk management

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?
- Do we have an accurate read on how our organization's culture is impacting how employees engage in risk management processes and conversations? If so, how do we know?

- 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 to their 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 signs of a dysfunctional culture that suppresses escalation of important risk information or encourages unacceptable risk taking? Are warning signs posted by the risk management function or internal audit addressed timely by executive management?

Evaluate the scope of risk focus

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?
- Does the process consider a sufficient time horizon to pick up strategic risks, e.g., the longer the horizon, the more likely new issues will present themselves? Does the process consider extreme as well as plausible scenarios?
- Is our focus on the identification of risks mostly on internal operations, people and processes with minimal focus on external risks linked to geopolitical shifts, emerging innovations, and changes in macroeconomic factors?
- Are we encouraging the identification of opportunities to take on more risk on a managed basis?

Ensure the robustness of risk assessment across the organization

Because risks are constantly changing, the risk management process needs to be definable and repeatable to ensure business leaders are staying abreast of emerging issues:

- Would most describe our organization's approach to risk management as one that is siloed across disparate functions in the organization or one that is more ad hoc than structured?
- Is the process supported by an effective methodology that is definable, repeatable and understood by key stakeholders?
- 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?
- 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?

- 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?

Nail down accountabilities for managing risks following a risk assessment

Following completion of a formal or informal risk assessment:

- Are risk owners assigned for newly identified risks?
- 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 effective risk response action plans developed to address the risk at the source? Are the risk owners accountable for the design and execution of those responses?
- 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?

> "With the disparity of views regarding risk in today's complex business environment, companies can best differentiate themselves with a properly structured risk-informed approach that considers the impact of risk on strategy and performance, measures both risks and opportunities, is integrated with strategy-setting and business planning and execution, and addresses the business needs, expectations and cultural attributes of the organization.
>
> — Emma Marcandalli, Managing Director, Protiviti

- 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 timely 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?

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 2019 provided in this executive summary prove useful. We also hope that the insights serve as a catalyst for an updated assessment of risks and the risk management capabilities in place within all organizations, as well as improvement in their risk assessment processes and risk management capabilities.

Methodology

We are pleased that participation from executives was strong again this year. Globally, 825 board members and executives across a variety of industries participated in this survey. We are especially pleased that we received responses from individuals all over the world, with 371 respondents (45%) based in North America and 454 respondents (55%) based outside this region. In 2018, our responses by region were also 45% from North America and 55% of the organizations from other regions. We are pleased that this year's report reflects a more diverse geographic coverage from around the globe. As a result, this report again provides a perspective about risk issues on the minds of executives at a global level.

Our survey was conducted online in the fall of 2018. 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, organization type, geographic location 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.

The following table lists the 30 risk issues rated by our respondents, arrayed across three categories — Macroeconomic, Strategic and Operational.

List of 30 Risk Issues Analyzed

TABLE 2

MACROECONOMIC RISK ISSUES

- Anticipated volatility in global financial markets and currency exchange rates may create significantly challenging issues for our organization to address
- 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 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
- Demands made by activist investors and other key stakeholders may significantly affect how we do business in the marketplace*
- 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

* Represents a new risk issue added to the 2019 survey.

STRATEGIC RISK ISSUES

- Rapid speed of disruptive innovations enabled by new and emerging technologies 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 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 vulnerabilities may trigger shareholder activism against our organization that may significantly impact our organization's strategic plan and vision

OPERATIONAL RISK ISSUES
■ The cultural behaviors and personal interactions with others exhibited by the organization's management team and other key representatives — as manifested through day-to-day decision-making, attitudes and conduct — may not be aligned with the long-term interests of shareholders, the board's risk appetite, compliance with laws and regulations, and/or the core values most accepted and rewarded by the marketplace*
■ 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
■ 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 and legacy IT infrastructure may not be able to 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

Research Team

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

NORTH CAROLINA STATE UNIVERSITY'S ERM INITIATIVE

- Mark Beasley
- Bruce Branson
- Don Pagach

PROTIVITI

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

The full report from North Carolina State University's ERM Initiative and Protiviti, *Executive Perspectives on Top Risks for 2019*, is available at **erm.ncsu.edu** and **protiviti.com/toprisks**.

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.

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The Enterprise Risk Management (ERM) Initiative in the Poole College of Management at North Carolina 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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