Executive Perspectives on Top Risks for 2018

Key Issues Being Discussed in the Boardroom and C-Suite

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

Executive Summary
Introduction

The impact of disruptive change, major cyber breaches affecting a number of organizations in the capital markets, the effects of hurricanes Harvey, Irma and Maria and other significant natural disasters, elections in Europe, geopolitical instability in Asia and the Middle East, volatility in commodity markets, continued unfolding of political agendas, anticipation of increases in interest rates, and unpredictable but inevitable terrorist events are only some of the drivers of uncertainty affecting the global business outlook for 2018. Entities in virtually every industry and country 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 unexpected surprises vividly illustrate the reality that organizations of all types face risks that can suddenly impact them with complex enterprisewide risk events of varying velocity and headline effect that threaten brand, reputation, and, for some, their very survival. Boards of directors and executive management teams cannot afford to manage risks casually on a reactive basis, especially in light of the rapid pace of disruptive innovation and technological developments in a 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 sixth annual risk survey of directors and executives to obtain their views on the extent to which a broad collection of risks are likely to affect their organizations over the next year.

Our respondent group, comprised primarily of board members and C-suite executives, provided their perspectives about the potential impact in 2018 of 30 specific risks across these three dimensions:\(^1\)

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

This executive summary provides a brief description of our methodology and an overview of the overall risk concerns for 2018, 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 processes.

Our full report (available at [erm.ncsu.edu](http://erm.ncsu.edu) or [protiviti.com/toprisks](http://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 (i.e., based in either North America, Europe, Asia-Pacific or Africa), and whether the organization has public debt.

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\(^1\) Our report about top risks for 2016 included 27 specific risks. Three additional risks were added for the 2017 survey and they remain in our 2018 survey, resulting in a list of 30 risks surveyed. See Table 1 for a list of the 30 risks addressed in this study.
About the Survey

We surveyed 728 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:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Risks with an average score of</th>
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<tbody>
<tr>
<td>Significant Impact</td>
<td>6.0 or higher</td>
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<td>Potential Impact</td>
<td>4.5 through 5.99</td>
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<tr>
<td>Less Significant Impact</td>
<td>4.49 or lower</td>
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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 2018. Respondents to the survey serve in a number of different board and executive roles.

<table>
<thead>
<tr>
<th>Executive Position</th>
<th>Number of Respondents</th>
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<tbody>
<tr>
<td>Board of Directors</td>
<td>86</td>
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<tr>
<td>Chief Executive Officer</td>
<td>31</td>
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<tr>
<td>Chief Financial Officer</td>
<td>89</td>
</tr>
<tr>
<td>Chief Risk Officer</td>
<td>202</td>
</tr>
<tr>
<td>Chief Audit Executive</td>
<td>102</td>
</tr>
<tr>
<td>Chief Information/Technology Officer</td>
<td>70</td>
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<tr>
<td>Other C-Suite</td>
<td>90</td>
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<tr>
<td>All other</td>
<td>58</td>
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<tr>
<td><strong>Total Number of Respondents</strong></td>
<td><strong>728</strong></td>
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In our full report, (available online at [erm.ncsu.edu](http://erm.ncsu.edu) and [protiviti.com/toprisks](http://protiviti.com/toprisks)), we analyze variances across different sizes and types of organizations, industry, and respondent position, in addition to differences between U.S.-, Europe-, Asia-Pacific- and Africa-based organizations. Page 17 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 58 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


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, fear of 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 and assess the organization’s key risk exposures, with the intent of reducing them to an acceptable level.

Key Findings

Survey respondents indicate that the overall global business context is slightly less risky in 2018 relative to the two prior years, with respondents in all regions of the world sensing a slight reduction in the magnitude and severity of risks on the horizon in 2018 related to 2017. Respondents in the European (which includes the United Kingdom) region seem to have the highest overall concern about the magnitude and severity of risks on the horizon in 2018 relative to the other regions. Our prior year survey saw an increase in all of the top 10 risks from 2016 to 2017. This year respondents only rated seven of the top 10 risks higher for 2018 relative to 2017, with three of the top 10 risks rated lower for 2018 relative to 2017. This suggests a potential shift in views about the riskiness of 2018 relative to 2017. Despite that slight reduction in risk concerns for some of the risks, a majority of respondents still rated each of the top 10 risks as a “Significant Impact” risk, and for our top risks among the top 10 the overall average score exceeded 6.0 (on a 10-point scale), placing the profile of top risks as “Significant Impact” on an overall basis.

Interestingly, respondents indicate that they are likely to devote additional time or resources to risk identification and management over the next 12 months. The overall reality of the riskiness of the global business environment continues to motivate boards and executives to continue their focus on effective risk oversight.

While respondents indicated slightly less concern about the overall magnitude and severity or risks for 2018 relative to the two prior years, there are noticeable shifts in what constitutes the top 10 risks for 2018 relative to last year. Two new risks moved into the top 10 spot for 2018 that were not in the top risks for 2017. Interestingly, concerns about the economy and regulatory scrutiny, which have been in the top two risk concerns for the past several years, fell deeper among the top 10 list for 2018. Those risks were topped by concerns related to the rapid speed of disruptive innovation impacting business models and concerns about resistance to change restricting the organization from making necessary adjustments to its business model. There is even greater concern about operational risk issues, with seven of the top 10 risks representing operational concerns (last year five of the top 10 related to such issues). Two of the top 10 risks relate to strategic risk concerns, with only one of the top 10 related to concern about macroeconomic risks. This year’s emphasis on operational risks is consistent with our results in the previous two years.
With respect to the top five risks overall:

- **Rapid speed of disruptive innovation** — This strategic risk soared to the top for 2018, exceeding concerns about the economy and regulatory oversight, which have held the top two spots in all prior years we have conducted this survey. Sixty-seven percent of our respondents rated this risk as a “Significant Impact” risk. This top risk for 2018 reflects respondent concerns that disruptive innovation or new technologies might emerge that outpace 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. 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 have the vision or foresight to anticipate the nature and extent of change. Concerns of this nature are elevated for 2018 (from fourth overall last year to the number one concern this year) relative to prior years. This is a top five risk for all six of the industry groups and all size categories of organizations we examine.

- **Resistance to change** — Coupled with concerns about the emergence of disruptive innovations, respondents also highlighted a cultural concern related to overall resistance to change within the organization. Respondents are growing even more focused on the organization’s potential lack of willingness to make necessary adjustments to the business model and core operations that might be needed to respond to changes in the overall business environment and industry. As many organizations have discovered in recent years, strategic error in the digital economy can be lethal. If major business model disruptors emerge, respondents are concerned that their organization may not be able to timely adjust its core operations to make required changes to the business model to compete.

- **Managing cyber threats** — Threats related to cyber security continue to be of concern as respondents focus on how events might disrupt core operations. To no surprise, this risk continues to be one of the most significant top operational risks overall and it is a top five risk for each of the four size categories of organizations as well as three of the six industry groupings we examine.

- **Regulatory change and heightened regulatory scrutiny** — This risk continues to represent a major source of uncertainty among the majority of organizations. Fifty-nine percent of our respondents rated this risk as a “Significant Impact” risk. This risk has been in our top two risk concerns all prior years we have conducted this survey. Thus, the fact it moved to the fourth risk indicates, while it is still a major concern, it may be of slightly less concern in 2018 relative to the prior five years. Political gridlock and checks and balances in governing institutions appear to have tempered the specter of significant change on the regulatory front. In the United States, the current administration has demonstrated a propensity to reduce the regulatory burden.

On page 15 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.
• **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 included in the top 10 risks each year since then. Interestingly, the level of concern is heightened for 2018 relative to the prior two years. Sixty-one percent of respondents rated this risk as a “Significant Impact” risk. This issue, coupled with concern related to resistance to change, can be lethal if it results in the organization’s leaders becoming out of touch with business realities.

Three additional findings of interest are noteworthy:

• **Mixed views about the magnitude and severity of risks expected in coming year** — There is variation in views among boards and C-suite executives regarding the magnitude and severity of risks for 2018 relative to prior years. Interestingly, board members report the highest increase in concern relative to their views in the prior year, suggesting heightened concerns for 2018. In contrast, while the level of concern stayed about the same for chief executive officers (CEOs) and chief financial officers (CFOs), the overall concern among chief risk officers (CROs) was notably lower for 2018 relative to 2017. CAEs and CROs appear to be the most optimistic, as they rated seven and four, respectively, of the 30 risks at the lowest impact level, while board members and most of the rest of the C-suite rated none of the 30 risks at the lowest level (a rating below 4.5 on our 10-point scale). The noted differences in risk viewpoints across different types of executives seem to be a concern at the global level, given that we find similar kinds of differences in viewpoints continue to be present when examining different regions of the world separately. These findings suggest there is a strong need for discussion and dialogue to ensure the organization is focused on the right emerging risk exposures.

• **Boards see riskier environment** — Interestingly, as noted above, board members perceive a much riskier environment in 2018 relative to 2017. Board members rated nine of the 30 risks as “Significant Impact,” whereas CEOs ranked none of the 30 risks as “Significant Impact” risks. While the overall concern about the magnitude and severity of risks was lower in 2018 relative to 2017 for CROs, they still identified five of the 30 risks as “Significant Impact” risks.

• **Industry groups have differing views of the risk environment** — While most industry groups sense that the magnitude and severity of risks affecting their organization are relatively the same in 2018 as compared to the prior year, the Financial Services and Energy and Utilities industry groups saw the largest decrease in overall risk concerns during the most recent year. This is largely due to reduced concerns about some of the macroeconomic risks and reduced concern about the potential for increased regulatory change and scrutiny in 2018 relative to 2017. The Technology, Media and Communications industry group reflects the highest overall concern related to the magnitude and severity of risks overall. Given rapid developments in technological advancements, this industry continues to experience significant change relative to others.

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 as to what the key risks are for 2018 based on the input of the participating executives and board members.

The list of top 10 global risks for 2018, along with their corresponding 2017 and 2016 scores, appears in Figure 1 on the following page.
Figure 1: Top 10 Risks for 2018

1. Rapid speed of disruptive innovations and/or new technologies within the industry may outpace our organization’s ability to compete and/or manage the risk appropriately, without making significant changes to our business model.

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

3. 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.

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

5. 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.

6. Our organization’s succession challenges and ability to attract and retain top talent may limit our ability to achieve operational targets.

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

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

9. 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.

10. Our existing operations 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.
In addition to our Key Findings, other notable findings this year with regard to those risks making the top 10 include the following:

- The risk of succession challenges and the ability to attract and retain talent continues to be an overall top 10 risk, likely triggered by a tightening labor market (though the decline in unemployment rates has been relatively modest), but it is especially prevalent for entities in the Consumer Products and Services, Healthcare and Life Sciences, and Energy and Utilities industry groups. To thrive in the digital age, organizations need to think and act digital and this requires a different set of capabilities and strengths. 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 slow-moving dinosaur of a company that is not 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.

- Concerns related to privacy and identity protection continue to be among the top 10 risk concerns for 2018. 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 personal information.

- Interestingly, respondents are not as concerned about economic conditions in domestic and international markets relative to prior years. In the five prior years we have conducted this study, economic concerns were high, placing this risk near or at the top of our top 10 risks each year. Last year, economic concern was the top risk concern, whereas it dropped several positions to the eighth position in the top 10 for 2018. In fact, this is the only macroeconomic risk included in the top 10 risk list, suggesting respondents seem more positive about macroeconomic issues for 2018 relative to the past several years.

- Two risks moved into the top 10 list of risks for the first time this year. Respondent concerns are growing surrounding 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 more nimble and 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. Additionally, respondents are concerned about the ability of their organization to adjust existing operations to meet performance expectations as well as competitors. This is especially heightened by the concern that new competitors may be able to leverage digital capabilities that allow them to introduce new business models more cost effectively. Hyper-scalability 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 timely to preserve customer 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. Additional insights about the overall risk environment for 2018 can be gleaned from these analyses, which we highlight in a number of charts and tables in our full report. Following are some significant findings:

- Consistent with the observation that respondents rated the overall magnitude and severity of the risk environment slightly lower for 2018 relative to 2017, the average risk score for 10 of the 30 risks decreased from 2017 to 2018. This is noticeably different from
2017, where we saw an increase in overall risk score for each of the risks surveyed in both 2016 and 2017. Taken together, these results suggest a slightly more positive outlook about the risk environment for 2018 relative to 2017. When we look at the results across different regions of the world (i.e., North America, Asia-Pacific, Europe and Africa), we find that respondents in the European region rated all of their top five risks as “Significant Impact” risks (i.e., average risk score of 6.0 or higher on our 10-point scale). In comparison, respondents in the Asia-Pacific and North American regions rated three of their top five risks as “Significant Impact” risks, while respondents from Africa rated just two as "Significant Impact" risks.

- Three of the top five risks for 2018 with the greatest increase in risk ratings from 2017 relate to operational risk concerns. Interestingly, two of those risks relate to cultural issues — resistance to change and the organizational environment affecting the identification and escalation of risks. Concerns about the emergence of competitors who can leverage digital-based technologies to trim operational costs is also an increased concern.

- Not surprisingly given concerns surrounding certain governments such as North Korea and certain regions such as the Middle East, respondents also exhibit increased concern related to geopolitical shifts and instabilities in governmental regimes. This risk increased the most out of all 30 risks.

- All organizations signaled an increased concern about identifying and responding to unexpected shifts in social, environmental, and other customer preferences. For certain demographic shifts, such as a growing aged population and urbanization, organizations are concerned that they may not recognize those shifts on a timely basis, or they are concerned that their existing business models may not be sustainable under new conditions.

- Surprisingly, there are noticeable differences in viewpoints between 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 2018. Board members are much more concerned about the overall magnitude and severity of risks relative to senior management. Board members ranked nine of the 30 risks as “Significant Impact” risks. In contrast, CEOs and CIOs ranked none of the 30 risks at that level, while CFOs only ranked three at that level.

- Board members are most concerned about the impact of the continued low interest rate environment on their organization’s operations. That represents their number one risk concern. They also identified four operational risks as “Significant Impact” risks: preparedness to manage cyber threats, inability to leverage “big data,” the ability to obtain affordable insurance, and resistance to change. Board members are also concerned about the entrance of new competitors in the marketplace and the ability to sustain customer loyalty. All of the top five risks identified by board respondents are “Significant Impact” risks.

- The top five risk concerns of CEOs include none that are “Significant Impact” risks and only two of their top five overlap with the top five risks of the board: cyber threats and ease of entrance of new competitors. CEOs are more worried about the lack of organic growth opportunities, the rapid speed of disruptive innovations, and anticipated volatility in the global financial markets and currencies. These differences in views highlight the critical importance of engaging in robust conversations with boards and senior management. It also suggests that board members may not be fully engaged with the digital revolution and its implications to the companies they serve.
The two largest size categories of organizations rated four of their top five risks as “Significant Impact” risks. The smallest organizations (those with revenues under $100 million) rated none of their top five risks as “Significant Impact.” Thus, the environment for large organizations appears to be the riskiest relative to entities in the other size categories. 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 2018 relative to 2017. These findings emphasize the reality that there is no “one size fits all” list of risk exposures across all organizations.

Globally, organizations from each of the four geographic regions agree that the overall magnitude and severity of risks facing the organization are expected to be high in 2018. The strategic threat from the rapid speed of disruptive innovations and the operational threat from resistance to change are noticeably high for all global regions, except Africa. The top five risks for organizations in the European region are dominated by macroeconomic risks: concerns over low interest rates, economic conditions restricting growth opportunities and anticipated volatility in global financial markets. North America and Africa are the only regions to identify succession challenges as a top five risk. The North American respondents are the only group to include cyber threats as a top five risk.

The full report on this study (available online at  [erm.ncsu.edu](http://erm.ncsu.edu) and [protiviti.com/toprisks](http://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 15 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.

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.
Sustained low fixed interest rates may have a significant effect on the organization’s operations

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

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

Anticipated volatility in global financial markets and currencies may create significantly challenging issues for our organization to address

Uncertainty surrounding political leadership in national and international markets may limit our growth opportunities

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 objectives

Anticipated changes in global trade policies may limit our ability to operate effectively and efficiently in international markets

Uncertainty surrounding costs of healthcare coverage for our employees may limit growth opportunities for our organization

<table>
<thead>
<tr>
<th>Macroeconomic Risk Issues</th>
<th>Board</th>
<th>CEO</th>
<th>CFO</th>
<th>CRO</th>
<th>CAE</th>
<th>CIO/CTO</th>
<th>Other C-Suite</th>
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<tr>
<td>Sustained low fixed interest rates may have a significant effect on the organization's operations</td>
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<td>Economic conditions in markets we currently serve may significantly restrict growth opportunities for our organization</td>
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<td>Anticipated increases in labor costs may affect our opportunity to meet profitability targets</td>
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<td>Anticipated volatility in global financial markets and currencies may create significantly challenging issues for our organization to address</td>
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<td>Uncertainty surrounding political leadership in national and international markets may limit our growth opportunities</td>
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<td>Our ability to access sufficient capital/liquidity may restrict growth opportunities for our organization</td>
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<td>Geopolitical shifts and instability in governmental regimes or expansion of global terrorism may restrict the achievement of our global growth objectives</td>
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<td>Anticipated changes in global trade policies may limit our ability to operate effectively and efficiently in international markets</td>
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<td>Uncertainty surrounding costs of healthcare coverage for our employees may limit growth opportunities for our organization</td>
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## Strategic Risk Issues

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<th>Risk Issue</th>
<th>Board</th>
<th>CEO</th>
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<th>Other C-Suite</th>
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<tr>
<td>Rapid speed of disruptive innovations and/or new technologies within the industry may outpace our organization’s ability to compete and/or manage the risk appropriately, without making significant changes to our business model</td>
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<td>Regulatory changes and regulatory scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered</td>
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<td>Ease of entrance of new competitors into the industry and marketplace may threaten our market share</td>
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<td>Sustaining customer loyalty and retention may be increasingly difficult due to evolving customer preferences and/or demographic shifts in our existing customer base</td>
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<td>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</td>
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<td>Shifts in social, environmental, and other customer preferences and expectations may be difficult for us to identify and address on a timely basis</td>
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<td>Our organization may not be sufficiently prepared to manage an unexpected crisis significantly impacting our reputation</td>
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<td>Growth through acquisitions, joint ventures and other partnership activities may be difficult to identify and implement</td>
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<td>Opportunities for organic growth through customer acquisition and/or enhancement may be significantly limited for our organization</td>
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Substitute products and services may arise that affect the viability of our current business model and planned strategic initiatives

Performance vulnerabilities may trigger shareholder activism against our organization that may significantly impact our organization's strategic plan and vision

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<tr>
<th>Operational Risk Issues</th>
<th>Board</th>
<th>CEO</th>
<th>CFO</th>
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A Call to Action: Questions to Consider

This report provides insights from 728 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 20 of the 30 risks included in prior year surveys as higher in 2018 relative to 2017, suggesting that there continues to be a number of uncertainties in the marketplace for 2018.

The message is that the rapid pace of change in the global marketplace provides a risky environment for entities of all types in which to operate. The unique aspect regarding disruptive change is that it represents a choice — which side of the change curve do organizations want to be on? For example, organizations need to make a conscious decision about whether they are going to be the disruptor and try to lead as a transformer of the industry or, alternatively, play a waiting game, monitor the competitive landscape and react only when necessary to defend market share. This is an important question because, with the speed of change and constant advances in technology, rapid response to new market opportunities and emerging risks can be a major source of competitive advantage. Conversely, failure to remain abreast or ahead of the change curve can place an organization in a position of becoming captive to events rather than charting its own course. For those organizations choosing not to actively disrupt the status quo, their challenge is to be agile enough to react quickly as an early mover. Not enough are.

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:

- Given the pace of change experienced in the industry and the relative riskiness and nature of the organization’s operations:
  - Is the risk assessment process frequent enough? Does it involve the appropriate organizational stakeholders?
  - Is the business environment monitored over time for evidence of changes that may invalidate one or more critical assumptions underlying the organization’s strategy?
  - Are risks evaluated in the context of the organization’s strategy and operations? Is adequate consideration given to macroeconomic issues?
  - Is the process supported by an effective methodology and relevant risk criteria? 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?
  - Does the process encourage an open, positive dialogue for identifying and evaluating opportunities and risks? Is attention given to reducing the risk of undue bias and groupthink? Does it give adequate attention to differences in viewpoints that may exist across different executives and different global jurisdictions?
  - 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?
  - Is the board informed of the results on a timely basis? Do directors agree with management’s determination of the significant risks?

- Following completion of a formal or informal risk assessment:
  - Are risk owners identified 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 their design and execution?

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 mid-course adjustments?

Is implementation of risk responses monitored by the risk owners?

Do decision-making processes consider the impact on the organization's risk profile?

With respect to the most critical risks facing the organization, do directors understand 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 management periodically evaluating changes in the business environment to identify the risks inherent in the organization's strategy? Is the board sufficiently involved in this process, particularly when such changes involve acquisition of new businesses, entry into new markets, the introduction of innovative technologies or alteration of key assumptions underlying the strategy?

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 risks or significant changes in the organization's risk profile? Is there a process for identifying emerging risks? Does it result in consideration of response plans on a timely basis?

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?

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?

These and other questions can assist organizations in defining their specific risks and assessing the adequacy of the processes informing risk management and board risk oversight. We hope this report provides important insights about perceived risks on the horizon for 2018 and serves as a catalyst for an updated assessment of risks and risk management capabilities within all organizations, as well as improvement in the assessment processes in place.
Methodology

We are pleased that participation from executives was strong again this year. Globally, 728 board members and executives across a number of industries participated in this survey. We are especially pleased that we received responses from individuals all over the world, with 327 respondents (45%) based in the United States and 401 respondents (55%) based outside the United States (133 respondents [18%] were based in the Asia-Pacific region, 198 respondents [27%] were based in Europe, 18 [3%] were based in Africa, with the remainder located elsewhere around the globe). In 2017 our responses by region were 55% U.S.-based and 45% non-U.S.-based organizations. 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 2017. 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 5.9 are classified as having a “Potential Impact” over the next 12 months.
- Risks with an average score of 4.4 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.

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<th>Table 1: List of 30 Risk Issues Analyzed</th>
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### Macroeconomic Risk Issues
- Anticipated volatility in global financial markets and currencies may create significantly challenging issues for our organization to address.
- Uncertainty surrounding political leadership in national and international markets may limit our growth opportunities.
- Anticipated 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.
- Uncertainty surrounding costs of healthcare coverage for our employees may limit 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 objectives.
- Anticipated increases in labor costs may affect our opportunity to meet profitability targets.
- Sustained low fixed interest rates may have a significant effect on the organization’s operations.

### 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 social, environmental, and other customer preferences and expectations may be difficult for us to identify and address on a timely basis.
- Ease of entrance of new competitors into the industry and marketplace 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.

* Represents a new risk issue added to the 2017 survey.
• Uncertainty surrounding the viability of key suppliers or scarcity of supply may make it difficult to deliver our products or services.

• 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 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 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.

• Our organization may face greater difficulty in obtaining affordable insurance coverages for certain risks that have been insurable in the past.
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
• Jim DeLoach
• Matthew Moore
• Dolores Atallo
• Kevin Donahue

The full report from North Carolina State University’s ERM Initiative and Protiviti, Executive Perspectives on Top Risks for 2018, 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 70 offices in over 20 countries.

We have served more than 60 percent of Fortune 1000® and 35 percent 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 NORTH CAROLINA STATE UNIVERSITY’S ERM INITIATIVE

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).