



Executive Perspectives on Top Risks for 2016

Key Issues Being Discussed in the Boardroom and C-Suite

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

INTRODUCTION

Volatility in the equity markets, falling oil prices, polarization surrounding the 2016 presidential elections in the United States, and recent moves by the U.S. Federal Reserve to gradually raise interest rates are only some of the drivers of uncertainty affecting the global business outlook for 2016 and beyond. Entities in virtually every industry and country are reminded, all too frequently, that they operate in a risky world. Recent terrorism events, perceived adjustments in expectations about economic conditions in China, the rapidly increasing costs of healthcare, and continued concerns about cyber-data breaches vividly illustrate the realities that organizations of all types face risks that can suddenly propel them into global headlines, creating complex enterprisewide risk events that threaten reputation and brand. The rapid and steep decline in oil prices was not anticipated by many players in the energy industry, reminding everyone that they need to expect the unexpected. 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.

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 fourth 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 2016 of 27 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 the pursuit of growth opportunities
- **Operational risks** that might affect key operations of the organization in executing its strategy

In presenting the results of our research, we begin with a brief description of our methodology and an executive summary of the results. Following this introduction, we discuss the overall risk concerns for 2016, including how they have changed from 2015 and 2014, followed by a review of results by size of organization and type of executive position, as well as a breakdown by industry, type of ownership structure (i.e., public company, privately held, not-for-profit and government), geographic location of their headquarters (i.e., U.S.-based or outside the United States), and whether they have rated debt outstanding. We conclude with a discussion of the organizations' plans to improve their capabilities for managing risk.

¹ Our report about top risks for 2014 included 22 specific risks. We added five additional risks to the survey for 2015, and these were retained for 2016. See Table 1 for a list of the 27 risks addressed in this study.

METHODOLOGY

We are pleased that participation from executives was strong again this year. Globally, 535 board members and executives across a number of industries participated in this survey. We are especially pleased that this year we received responses from individuals all over the world, with 250 respondents based in the United States and 285 respondents based outside the United States. As a result, this report provides perspective about risk issues on the minds of executives at a global level.

Our survey was conducted in person and online in the fourth quarter of 2015. Each respondent was asked to rate 27 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 27 risk issues included, 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 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 also review results for various demographic groups (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 27 risk issues rated by our respondents, arrayed across three categories – Macroeconomic, Strategic and Operational.

Table 1: List of 27 Risk Issues Analyzed

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 complying with healthcare reform legislation 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*

Strategic Risk Issues

- 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
- 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*

* Represents a new risk issue added to the 2015 survey.

Operational Risk Issues

- 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 cyberthreats 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
- 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*

* Represents a new risk issue added to the 2015 survey.

EXECUTIVE SUMMARY

Volatility in equity markets. Falling oil prices. Global terrorism. Escalating healthcare costs. Uncertainties in political regimes in certain parts of the world. Disruptive technological innovation. Expanding regulation and oversight. Shifts in expectations about China's economy. Strong U.S. dollar. These and a host of other significant risk drivers are contributing to the risk dialogue 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, intense 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 to identify and assess the organization's key risk exposures, with the intent of reducing them to an acceptable level.

Key Findings

- **Overall, survey responses suggest a global business environment in 2016 that is slightly more risky for organizations than it was in 2015, but not as risky as in 2014** – Most respondents indicated their organizations are likely to invest additional resources toward risk management in 2016. This seems consistent with the view that expectations for more effective risk oversight continue to rise for most organizations. More organizations are realizing that additional risk management sophistication is warranted given the fast pace in which complex risks are emerging.
- **The top 10 risks overall vary in nature** – There continue to be concerns about operational risk issues, with five of the top 10 risks representing operational concerns. Three of the top 10 risks relate to strategic risk concerns, with two related to concerns about macroeconomic issues. This year's emphasis on operational risks is consistent with our 2015 results. This differs from the concern over strategic risks that we observed in 2014.
- **With respect to the top five risks overall:**
 - **Regulatory change and heightened regulatory scrutiny** – For the majority of organizations, this risk continues to represent the top overall risk for the fourth consecutive year. Sixty percent of our respondents rated this as a "Significant Impact" risk.
 - **Economic conditions in domestic and international markets** – This risk level is slightly elevated when compared to the two prior years. Similar to concerns about regulatory scrutiny, 60 percent of respondents rated this as a "Significant Impact" risk. Interestingly, this was rated as the top risk by both boards of directors and chief executive officers (CEOs) and ranked among the top five risks for all other executives except chief audit executives (CAEs). That these leaders appear to have uncertainty regarding the global economic climate is an important message.
 - **Concerns about cyberthreats disrupting core operations** – With little surprise, this risk is again a top five concern for 2016, as well as the top operational risk overall and for the largest organizations.
 - **Succession challenges and the ability to attract and retain talent** – This risk is especially prevalent for smaller organizations (those with revenues under \$1 billion), likely triggered by a tightening labor market (though the decline in unemployment rates has been relatively modest), and the respondents' perception that significant operational challenges may arise if organizations are unable to sustain a workforce with the skills and expertise needed for growth.
 - **Privacy and identity protection** – Respondents ranked this risk as a top five risk concern for the first time in 2016. The inclusion of this risk into the top five is consistent with the increasing number of reports of hacking scandals and growing concern over protecting personally identifiable information.
- **There are growing concerns about the rapid speed of disruptive innovations and new technologies** – The perceived impact of these risk issues is noticeably higher than the prior two years, moving this risk into the top 10 for 2016.

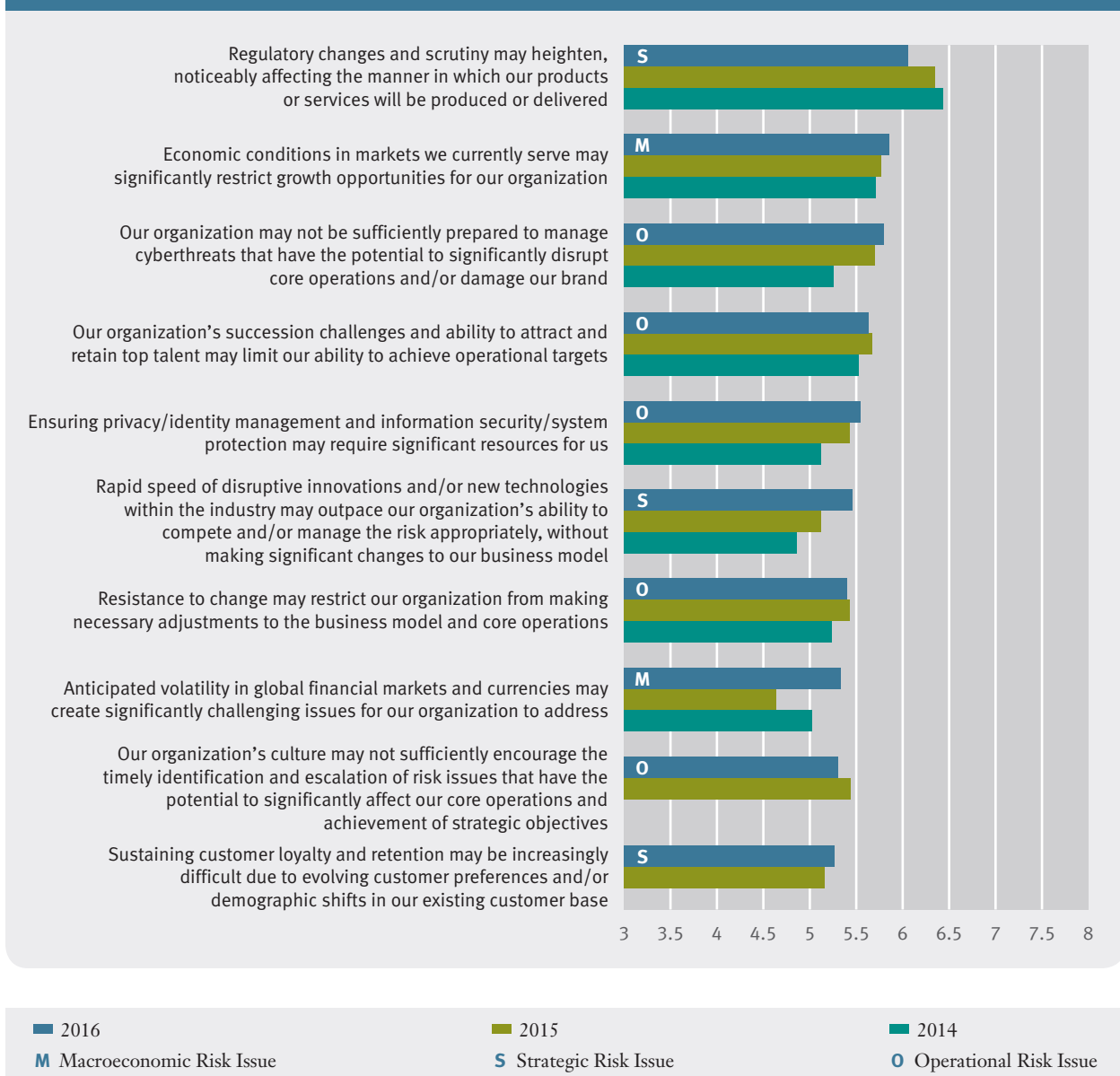
Key Findings (Continued)

- **Boards of directors, CEOs and other members of the executive team report differing views of the top risk exposures facing their organizations** – The level of impact of risk concerns among boards of directors is noticeably less risky compared to members of the executive team, who see the outlook for 2016 as more risky relative to their board peers. Board members rated 17 of the 27 risks at the lowest impact level, while CEOs rated none of the 27 risks at the lowest level. These findings suggest there is a strong need for discussion and dialogue to ensure the organization is focused on the right emerging risk exposures.
- **Interestingly, CEOs and chief financial officers (CFOs) perceive a riskier environment relative to other members of management** – They rate none of the risks at the lowest impact level (a rating of 4.49 or lower on our 10-point scale) compared to other members of management. However, CAEs rated the greatest number of risks as “Significant Impact” risks (a rating of 6.0 or higher).
- **On a global level, organizations see similar risks** – Regardless of geographic location, organizations face challenges related to regulatory scrutiny, economic conditions, and preparedness for cyberthreats. However, one notable difference is that U.S.-based companies ranked economic conditions a half point lower in significance compared to non-U.S.-based organizations. This ranking likely would be higher if this study had been conducted in early 2016 rather than the fourth quarter of 2015.

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 the risks. This survey provides insights across different sizes of companies and across multiple industry groups as to what the key risks are for 2016 based on the input of the participating executives and board members.

The list of top 10 risks for 2016, along with their 2015 and 2014 scores, appears in Figure 1 on the following page. Table 2 on page 9 lists the top 10 risks with the percentage responses for the three risk classifications (Significant Impact, Potential Impact, Less Significant Impact).

Figure 1: Top 10 Risks for 2016



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

- Related to risks of managing cyberthreats, respondents expressed concern about their organization's ability to adequately resource efforts needed to ensure privacy/identity management and information security on an ongoing basis. The level of risk concern for each of these two risks has increased steadily over the past two years. It is a concern across most sizes of organizations, and it is a particular concern for organizations in the Financial Services; Technology, Media and Communications; and Healthcare and Life Sciences industry groups.
- Other top risks, while not perceived as having a "Significant Impact" overall, include risks related to concerns about the organization's resistance to change restricting needed adjustments to the business model, and anticipated volatility in global financial markets and currencies that may

create significant challenging issues for organizations. With respect to the latter, note that the risk declined significantly for 2015 and then increased significantly for 2016, reflecting fluctuating levels of concern with respect to volatility in financial markets and currencies.

- Two new risk categories added to last year's survey (in 2015) again made the top 10 list of concerns for the full sample. In addition to the risk related to the organization's culture being insufficient to encouraging risk discussions, respondents also ranked the risk related to sustaining customer loyalty and retention as a top risk area.

WHILE CONCERNS ABOUT REGULATORY CHANGES AND REGULATORY SCRUTINY ARE DECREASING, IT IS IMPORTANT TO NOTE THAT THIS RISK STILL REPRESENTS THE TOP RISK CONCERN ACROSS ALL RESPONDENTS FOR 2016.

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 2016 can be gleaned from these analyses, which we highlight in a number of charts and tables later in this report. Following are some significant findings from our sub-analyses:

- Three of the top five risks for 2016 with the greatest increase in risk ratings from 2015 relate to operational risk concerns, while none of those risks increasing the most relate to strategic risk concerns. In contrast, two of those risks that decreased the most from 2015 to 2016 relate to strategic risk issues. While concerns about regulatory changes and scrutiny are decreasing, it is important to note that this risk still represents the top risk concern across all respondents for 2016.
- Interestingly, CEOs and CFOs rated none of the 27 risks at the lowest impact level ("Less Significant Impact" – rating of 4.49 or lower), suggesting they have overall concerns about a number of risks. CEOs ranked concerns about economic conditions as a "Significant Impact" risk. While CAEs rated seven of the 27 risks at the lowest impact level, they identified three risks at the highest impact level. This demonstrates there may be varying views within management teams regarding their organization's risk profile.
- Among the mix of types of risks, boards of directors identified only one strategic risk as a top five risk concern, with the remaining risks related to macroeconomic and operational risk issues. In contrast, CEOs identified strategic risk issues as three of their top five risk issues. Furthermore, most other executives rated more operational risks in their top five lists of concerns relative to strategic and macroeconomic risks. This disparity in viewpoints emphasizes the critical importance of both the board and management team engaging in risk discussions, given their unique perspectives may be contributing to an apparent lack of consensus about the organization's most significant emerging risks.
- Consistent with our survey results from prior years, the environment for the largest organizations appears to be the riskiest relative to the other size categories. The largest organizations (those with revenues of \$10 billion or greater) rated all of their top five risks as "Significant Impact" risks. This is in contrast to all other sized organizations that did not rate any of their top five risks as "Significant Impact" risks, except for one risk rated at that level for the smallest category of organizations. Concerns about operational risks were common among all sizes of organizations (although the specific operational risks differ), and concerns about those risks are generally higher for 2016 relative to 2015. These findings emphasize the reality that there is no "one size fits all" list of risk concerns.
- With respect to industry groupings, the Healthcare and Life Sciences industry group appears to have the highest overall level of risk concern, with five of the 27 risks rated as "Significant Impact" risks. Not surprisingly, respondents in the Healthcare and Life Sciences industry group indicated the greatest increase, as compared to other industry groupings, for 2016 in their overall impressions about the magnitude and severity of risks.

ON PAGE 47 WE OFFER A CALL TO ACTION TO BOARD MEMBERS AND EXECUTIVE MANAGEMENT TO CONSIDER SEVERAL QUESTIONS THAT WE PROVIDE AS A DIAGNOSTIC TO EVALUATE AND IMPROVE THEIR ORGANIZATION'S RISK ASSESSMENT PROCESS.

- Both U.S.-based and non-U.S.-based organizations identified regulatory issues, economic conditions and cyberthreats among their top five risk concerns. U.S.-based firms rated more operational risks among their top risk concerns, while non-U.S. firms only identified one operational risk as a top five concern. U.S.-based firms are more concerned about succession challenges and ensuring privacy/identity management, while non-U.S.-based firms are more concerned about anticipated volatility in global financial markets and currencies, along with the ease of entrance of new competitors.

The remainder of this report includes our in-depth analysis of perceptions about specific risk concerns. We identify and discuss variances in the responses when viewed by organization size, ownership type and industry, as well as by respondent role. In concluding this study, on page 47 we offer a call to action to board members and executive management to consider several questions that we provide 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.

Table 2: Top 10 Risks (with Percentages of Responses by "Impact" Level)

Risk Description	Significant Impact (6 – 10)	Potential Impact (5)	Less Significant Impact (1 – 4)
Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered	60%	12%	28%
Economic conditions in markets we currently serve may significantly restrict growth opportunities for our organization	60%	10%	30%
Our organization may not be sufficiently prepared to manage cyberthreats that have the potential to significantly disrupt core operations and/or damage our brand	57%	13%	30%
Our organization's succession challenges and ability to attract and retain top talent may limit our ability to achieve operational targets	52%	15%	33%
Ensuring privacy/identity management and information security/system protection may require significant resources for us	53%	15%	32%
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	51%	21%	28%
Resistance to change may restrict our organization from making necessary adjustments to the business model and core operations	49%	18%	33%
Anticipated volatility in global financial markets and currencies may create significantly challenging issues for our organization to address	50%	19%	31%
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	45%	21%	34%
Sustaining customer loyalty and retention may be increasingly difficult due to evolving customer preferences and/or demographic shifts in our existing customer base	46%	22%	32%

OVERALL RISK CONCERNS FOR 2016

Before asking respondents to assess the importance of each of the 27 risks, we asked them to provide their overall impression of the magnitude and severity of risks their organization will be facing with respect to reaching or exceeding profitability (or funding) targets over the next 12 months. We provided them with a 10-point scale where 1 = “Extremely Low” and 10 = “Extensive.” The table below shows a slight increase in the perceptions of the magnitude and severity of risks between 2015 and 2016, although both years are below the level two years earlier.

Overall, what is your impression of the magnitude and severity of risks your organization will be facing with respect to reaching or exceeding profitability (or funding) targets over the next 12 months?	2016	2015	2014
	6.1	6.0	6.4

The above data shows there appears to be only slightly higher overall concern about the risk environment in general relative to last year, suggesting the concerns about the overall riskiness of the business environment are similar to 2015.

Figure 1 (shown earlier) summarizes the top 10 risks for 2016. While some of the risks in our list of top 10 risk concerns for 2016 were top risk concerns noted in our reports from prior years, there are some notable changes in top risk issues for the upcoming year. There also are a number of differences when reviewing specific breakdowns of the results – for example, boards of directors are mostly concerned about macroeconomic and operational risks, while CEOs are focused primarily on strategic risks. Respondents representing other management positions, however, indicate ongoing concerns about operational risk issues. Only two of the top 10 risk issues for 2016 relate to macroeconomic concerns, while three others relate to strategic risk issues. Thus, operational risks again dominate the 2016 top 10 risk challenges.

Similar to prior years, a concern that **regulatory changes and heightened regulatory scrutiny** may affect the manner in which an organization’s products and services will be produced or delivered remains the top risk for 2016. While the level of concern about this risk is not as high as the prior year, this risk is at the top of the list for all four years that we have conducted this survey, suggesting companies continue to have significant anxiety that regulatory challenges may affect their strategic direction. This may be particularly relevant in 2016 given significant differences in the views among U.S. presidential candidates regarding the role of government. The stakes are high since, without effective management of regulatory risks, organizations are reactive, at best, and noncompliant, at worst, with all of the attendant consequences. Even marginally incremental regulatory change can add tremendous cost to an organization, and the mere threat of change can create significant uncertainty that can hamper hiring and investment decisions. The pace of regulatory and legislative change can affect an organization’s operating model to produce or deliver products or services, alter its costs of doing business, and affect its positioning relative to its competitors. That this risk remains top of mind suggests the cost of regulation as well as the influence of regulation on business models remain high in many industries.

Consistent with the prior year’s survey, respondents continue to indicate a similar level of notable concern about overall **economic conditions restricting growth** in markets their organizations serve. Volatility in the equity markets, continued declines in oil and gas prices, massive immigration pressures on Europe and the United States, concerns about continued terrorism threats, questions about the possibility of an economic slowdown in China, continued strengthening of the U.S. dollar and broader currency volatility, uncertainty regarding the impact of potential actions and policy divergence by central banks in many countries in the global marketplace, and the unknown effect on U.S. economic policy that may result from U.S. national elections in November 2016 continue to dampen the outlook for the global economy. Potentially, it also suggests concern over a “new normal” for businesses learning to operate in an environment of slower organic growth. In rating this risk, executives and directors may be mindful that

the pace of economic growth could shift, dramatically and quickly, in any region of the global market. As a result of this continuing concern, companies may be aggressive in seeking new markets and new ways of serving customers to stimulate fresh sources of growth.

GIVEN PUBLICITY ABOUT DATA BREACHES AT MAJOR RETAILERS, GLOBAL FINANCIAL INSTITUTIONS AND OTHER HIGH-PROFILE COMPANIES, AND THE GROWING PRESENCE OF STATE-SPONSORED CYBERTERRORISM, MOST EXECUTIVES RECOGNIZE THE NEED FOR “CYBER-RESILIENCY,” REALIZING IT IS NOT A MATTER OF *IF* A CYBER-RISK EVENT MIGHT OCCUR, BUT MORE A MATTER OF *WHEN* IT WILL OCCUR.

With little surprise, concerns about the risk of **cyberthreats disrupting core operations for organizations** moved into the top five list of risk concerns. Given publicity about data breaches at major retailers, global financial institutions and other high-profile companies, and the growing presence of state-sponsored cyberterrorism, most executives recognize the need for “cyber-resiliency,” realizing it is not a matter of *if* a cyber-risk event might occur, but more a matter of *when* it will occur. With the apparent level of sophistication of perpetrators and the significant impact of a breach, most organizations recognize the substantial threat linked to their reliance on technology for executing their global strategies and the inability to adequately insure for potential costs of damages. As senior executives and directors sharpen their understanding of this risk, they appreciate that it is a business issue rather than an IT issue, necessitating the identification of the most critical information and proprietary assets (the “crown jewels”), an evergreen assessment of the threat landscape, and an effective incident response plan.

Coupled with concerns about cyberthreats are challenges related to **privacy/identity management and information security/system protection**. Technological innovation is a powerful source of disruptive change, and no one wants to be on the wrong side of it. Cloud computing, social media, mobile technologies and other initiatives to use technology as a source of innovation and an enabler to strengthen the customer experience present new challenges for managing privacy, information and system security risks. Recent hacking attacks that exposed tremendous amounts of identity data involving a number of large companies and the federal government highlight the realities of this growing risk concern.

Also included in the top five risks is concern about **succession planning and acquiring and retaining talent**. For the past three years, this risk has ranked fourth in the list of top 10 risks. However, the overall score on the 10-point scale was slightly lower this year relative to last year. The war for talent continues as a concern, as companies have an urgent need for the requisite skills and expertise to implement complex strategies and a significant shortfall of workers looms on the horizon in many developed countries. This risk translates into succession issues that may not be addressed adequately. As organizations focus on managing profitability, they continue to explore alternative staffing models that provide more flexibility, such as part-time arrangements and contractors for retaining or replacing talent.

The **rapid speed of disruptive innovations and drastic changes that new technologies are having in the marketplace** moved this risk higher on the top 10 list of risks for 2016 relative to last year. With the speed of change and the advancement of technologies, rapid response to changing market expectations can be a major competitive advantage for organizations that are agile, nimble and able to avoid cumbersome bureaucratic processes that slow down the ability to adjust to new market realities.

Another concern is that **resistance to change may restrict necessary adjustments to the business model and core operations**. In these uncertain times, it makes sense to increase the organization’s ability to change and adapt to a rapidly evolving business environment. Therefore, response readiness is important, as is the agility and resiliency of the organization. Early movers able to exploit market opportunities and respond to emerging risks ahead of the herd are more likely to survive and prosper in a rapidly changing environment.

As demonstrated by sudden drops in equity markets in late 2015 and early 2016, it is not surprising that risks related to the impact on organizations resulting from **volatility in global financial markets and currencies** increased notably from last year, making the top 10 list of risks for 2016. The strong U.S. dollar, the impact of a slowing Chinese economy and uncertainty surrounding the U.S. Federal Reserve's potential move from passive to active tightening, forcing upward shifts in interest rates as central banks in other major economies are acting to reduce rates, all add to confusion in the marketplace.

DESPITE THE RECOGNITION THAT THERE ARE A NUMBER OF TOP RISK CONCERNS ALONG OPERATIONAL, STRATEGIC AND MACROECONOMIC DIMENSIONS, THERE APPEARS TO BE AN OVERALL LACK OF CONFIDENCE THAT PROCESSES ARE IN PLACE FOR INDIVIDUALS TO RAISE RISK CONCERNS TO THE LEADERSHIP OF THE ORGANIZATION.

Among the five new risks we added to last year's survey, two made the top 10 list again for 2016. Respondents expressed overall concern that their **organization's culture may not encourage the timely identification and escalation of risk issues** that might significantly affect core operations. Despite the recognition that there are a number of top risk concerns along operational, strategic and macroeconomic dimensions, there appears to be an overall lack of confidence that processes are in place for individuals to raise risk concerns to the leadership of the organization. The collective impact of the tone at the top, tone in the middle and tone at the bottom on risk management, compliance and responsible business behavior has a huge effect on timely escalation of risk issues. Therefore, timely identification and escalation of key risks is not easy, which is likely why this risk was ranked highly.

The final risk making the top 10 list relates to concerns about challenges with **sustaining customer loyalty and retention**. Customer preferences are shifting rapidly, making it difficult to retain customers in an environment of modest growth in certain sectors. Not only is preserving customer loyalty more cost-effective than acquiring new customers, but loyal customers also are more likely to purchase higher-margin products and services over time. Loyal customers reduce marketing costs as well as costs associated with educating customers. That is why sustaining customer loyalty and retention is a high priority for customer-focused organizations.

While only one of the top 10 risks – regulatory change – is rated as a “Significant Impact” risk (i.e., an average risk score of 6.0 or higher) for this year, the overall risk scores for six of the 10 top risks were rated riskier by respondents in 2016 relative to 2015. This suggests an overall increase in concerns about these risk issues for the upcoming year relative to prior years.

Of note, two risks from the 2015 top 10 list dropped out of this year's top 10:

- Our organization may not be sufficiently prepared to manage an unexpected crisis significantly impacting our reputation
- 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

We also compared the average scores for 2016 for the total population of 27 risks that we examined in 2015 to identify those risks with the largest changes in scores from 2015 to 2016. The five risks with the greatest increase in risk scores are shown in Table 3 on the following page. Three of the five 2016 risks with the biggest year-over-year increase relate to operational risks and two relate to macroeconomic issues. The fact that none of the biggest increases in risks relate to strategic issues suggests that respondents are more concerned about the impact that geopolitical, economic and various operational issues may have on their core business.

Indeed, most of the risks with the largest increase in 2016 from 2015 are linked to overall concerns about geopolitical, global economic and various operational risks. Topping the list are concerns about supply chain vulnerabilities, as respondents are focused on uncertainty surrounding the ability to deliver products or services. Among the increasing risk issues, respondents also highlighted that their organizations may face greater difficulty in obtaining affordable insurance coverages for certain risks that may have been insurable in the past. Similarly, respondents are more concerned about anticipated changes in global trade policies amidst rising nationalism that could lead to inward-looking policies and trade barriers, as well as anticipated volatility in global financial markets and currencies and risks arising from reliance on outsourcing and strategic sourcing arrangements.

Table 3: Top 5 Increasing Risks

Risk Description	Type of Risk	2016	2015	Increase
Uncertainty surrounding the viability of key suppliers or scarcity of supply may make it difficult to deliver our products or services	Operational	4.54	3.64	0.90
Our organization may face greater difficulty in obtaining affordable insurance coverages for certain risks that have been insurable in the past	Operational	4.09	3.24	0.85
Anticipated changes in global trade policies may limit our ability to operate effectively and efficiently in international markets	Macroeconomic	4.45	3.74	0.71
Anticipated volatility in global financial markets and currencies may create significantly challenging issues for our organization to address	Macroeconomic	5.33	4.65	0.68
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	Operational	4.93	4.31	0.62

We also examined those risks with the greatest reduction in risk impact scores from 2015 to 2016 (see Table 4). These risks were scattered across all three categories (two strategic, two operational and one macroeconomic) and generally represent small declines (much smaller than the increases noted in Table 3).

Table 4: Top 5 Decreasing Risks

Risk Description	Type of Risk	2016	2015	Decrease
Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered	Strategic	6.06	6.35	-0.29
Uncertainty surrounding political leadership in national and international markets may limit our growth opportunities	Macroeconomic	5.00	5.15	-0.15
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	Operational	5.30	5.45	-0.15
Our organization may not be sufficiently prepared to manage an unexpected crisis significantly impacting our reputation	Strategic	5.19	5.34	-0.15
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	Operational	5.10	5.17	-0.07

THREE-YEAR COMPARISON OF RISKS

We provide an analysis of the overall three-year trends for 22 of the 27 risks surveyed this year, and we are also able to compare 2015 and 2016 trends for the five risks we added to last year's study.

As discussed previously, to help identify differences in risk concerns across respondent type, we group all the risks based on their average scores into one of three classifications. Consistent with our three prior studies, we use the following color-coding scheme to highlight risks visually using these three categories. Table 5 that follows summarizes the impact assessments for each of the 27 risks for the full sample, and it shows the color code for the 22 risks examined in all three years. Recall that we added five more risks to the 2015 study (for a total of 27 risks considered in 2015 and 2016). Thus, we show only the 2015 and 2016 results for the five risks added in 2015.

- Significant Impact – Rating Equals 6.0 or higher
- Potential Impact – Rating Equals 4.5 – 5.99
- Less Significant Impact – Rating 4.49 or lower

For the most part, the relative significance of the risks has remained consistent for all years, as observed by the consistency in color reflected for most risks across the three years reported. Interestingly, only one risk – concerns about regulatory change and regulatory scrutiny – is classified as a “Significant Impact” risk (i.e., in red) over the past three years.

Thirteen of the 22 risks where we have data for all three years remain consistently at the “Potential Impact” level (i.e., in yellow) across all three years, suggesting that a number of risk concerns repeatedly fall into a category of risks to keep an eye on given they might emerge as more significant issues. Only one of the 22 risks with data for 2014, 2015 and 2016 is consistently at the “Less Significant Impact” level (i.e., all green).

Five of the 27 risks surveyed in 2016 increased from “Less Significant Impact” to “Potential Impact” from 2015, indicating a shift toward greater risk concern. None of the 27 risks changed from “Potential Impact” to “Less Significant Impact” between 2015 and 2016. Collectively, these findings suggest there are a number of risk concerns on the horizon that may be worthy of proactively monitoring over time.

Table 5: Perceived Impact over Next 12 Months – Full Sample

Macroeconomic Risk Issues	2016 Rank	2016	2015	2014
Economic conditions in markets we currently serve may significantly restrict growth opportunities for our organization	2	●	●	●
Anticipated volatility in global financial markets and currencies may create significantly challenging issues for our organization to address	8	●	●	●
Uncertainty surrounding political leadership in national and international markets may limit our growth opportunities	16	●	●	●
Our ability to access sufficient capital/liquidity may restrict growth opportunities for our organization	22	●	●	●
Uncertainty surrounding costs of complying with healthcare reform legislation may limit growth opportunities for our organization	24	●	●	●
Anticipated changes in global trade policies may limit our ability to operate effectively and efficiently in international markets	25	●	●	●
Geopolitical shifts and instability in governmental regimes or expansion of global terrorism may restrict the achievement of our global growth objectives	26	●	●	N/A

Strategic Risk Issues	2016 Rank	2016	2015	2014
Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered	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	6	●	●	●
Sustaining customer loyalty and retention may be increasingly difficult due to evolving customer preferences and/or demographic shifts in our existing customer base	10	●	●	N/A
Our organization may not be sufficiently prepared to manage an unexpected crisis significantly impacting our reputation	11	●	●	●
Shifts in social, environmental and other customer preferences and expectations may be difficult for us to identify and address on a timely basis	13	●	●	●
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	14	●	●	N/A
Opportunities for organic growth through customer acquisition and/or enhancement may be significantly limited for our organization	17	●	●	●
Growth through acquisitions, joint ventures and other partnership activities may be difficult to identify and implement	21	●	●	●
Substitute products and services may arise that affect the viability of our current business model and planned strategic initiatives	20	●	●	●
Ease of entrance of new competitors into the industry and marketplace may threaten our market share	18	●	●	●
Operational Risk Issues	2016 Rank	2016	2015	2014
Our organization may not be sufficiently prepared to manage cyberthreats that have the potential to significantly disrupt core operations and/or damage our brand	3	●	●	●
Our organization's succession challenges and ability to attract and retain top talent may limit our ability to achieve operational targets	4	●	●	●
Ensuring privacy/identity management and information security/system protection may require significant resources for us	5	●	●	●
Resistance to change may restrict our organization from making necessary adjustments to the business model and core operations	7	●	●	●
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	9	●	●	N/A
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	15	●	●	●
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	12	●	●	●
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	19	●	●	●
Uncertainty surrounding the viability of key suppliers or scarcity of supply may make it difficult to deliver our products or services	23	●	●	●
Our organization may face greater difficulty in obtaining affordable insurance coverages for certain risks that have been insurable in the past	27	●	●	N/A

ANALYSIS ACROSS DIFFERENT SIZES OF ORGANIZATIONS

The sizes of organizations, as measured by total revenues, vary across our 535 respondents, as shown below. The mix of sizes of organizations represented by respondents is relatively similar to the mix of respondents in our prior years' surveys, although we did hear this year from a greater percentage of larger organizations (with revenues of \$1 billion or more):

Most Recent Revenues	Number of Respondents
Revenues \$10 billion or greater	64
Revenues \$1 billion to \$9.99 billion	258
Revenues \$100 million to \$999 million	143
Less than \$100 million	70
Total Number of Respondents	535

The overall outlook about risk conditions differs between large and small organizations. Larger organizations (those with revenues greater than \$1 billion) indicated that the magnitude and severity of risks is higher in 2016, while smaller organizations signaled a slight reduction in the magnitude and severity of risks. We asked respondents to provide their overall impression of the magnitude and severity of risks their organization will be facing with respect to reaching or exceeding profitability (or funding) targets over the next 12 months, using a 10-point scale where 1 = "Extremely Low" and 10 = "Extensive." The larger organizations increased back to or beyond levels noted two years ago, while smaller organizations continue to move below levels noted in 2014 and 2015.

<i>Overall, what is your impression of the magnitude and severity of risks your organization will be facing with respect to reaching or exceeding profitability (or funding) targets over the next 12 months?</i>	2016	2015	2014
Organizations with revenues \$10 billion or greater	6.8	5.7	6.4
Organizations with revenues between \$1 billion and \$9.99 billion	6.4	6.0	6.5
Organizations with revenues between \$100 million and \$999 million	5.6	5.9	6.1
Organizations with revenues less than \$100 million	5.8	6.0	6.7

Consistent with our findings related to the overall top 10 risks for 2016 for the full sample, concerns about the potential impact of regulatory changes and heightened regulatory scrutiny affecting the manner in which products and services will be produced or delivered continue to be noticeably high for all sizes of organizations. Interestingly, only the largest organizations (those with revenues \$10 billion or greater) and the smallest organizations (those with revenues less than \$100 million) scored any of their top five risks as a "Significant Impact" risk. Concerns about regulatory changes and regulatory scrutiny impacting how organizations do business soared over 1.0 point on the 10-point scale from 2015 for the largest organizations, and noticeable increases for the risk related to regulatory scrutiny also occurred for the smallest organizations.

While regulatory concerns were not rated as “Significant Impact” risks for the organizations in the middle two size categories, that risk was included as a top five risk for all sizes of organizations. Thus, uncertainty surrounding regulations and greater oversight continues to be top of mind for executives in all sizes of organizations.

Not surprisingly, concerns about cyberthreats made the top five lists for all size categories of organizations, while last year it was in the top five just for the two largest size categories. Given the size and visibility in the marketplace and the increased awareness of cyberthreats that might also threaten information security, organizations of all sizes are signaling heightened concerns about these potential risks. While larger organizations may be more apt to regard themselves as higher risk because of the perception that their size elevates their profile to a target of choice, now all sizes of organizations sense they are vulnerable to cyberthreats.

CLEARLY, THE ECONOMIC ENVIRONMENT, COMBINED WITH CONCERNS ABOUT REGULATORY SCRUTINY, ARE OF PARAMOUNT CONCERN TO MANY ORGANIZATIONS, INFLUENCING THEIR DECISIONS TO EXPAND, INVEST AND HIRE.

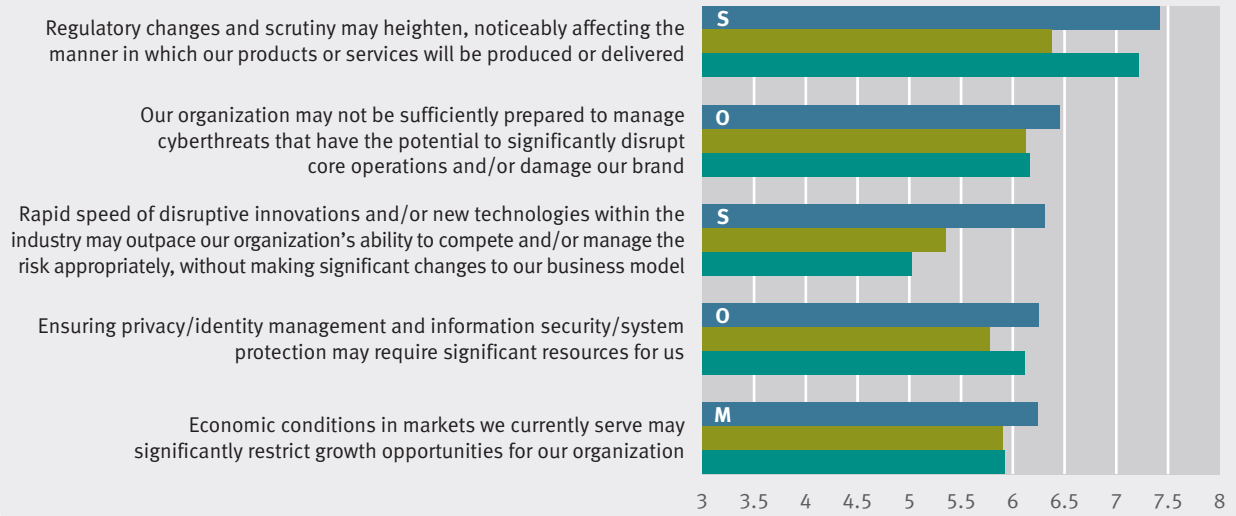
Concerns about economic conditions in markets they serve and concerns about ensuring privacy/identity management and information security protection remain in the top five lists for all organizations, except those with revenues between \$100 million and \$999 million. Clearly, the economic environment, combined with concerns about regulatory scrutiny, are of paramount concern to many organizations, influencing their decisions to expand, invest and hire.

Interestingly, the largest organizations (those with revenues of \$10 billion or greater) rated as a top five risk concerns over the rapid speed of disruptive innovations and/or new technologies within the industry outpacing the organization’s ability to compete and/or manage the risk appropriately, without making significant changes to the business model. Because these organizations have established business models, they have the most to lose from new entrants to the market, disintermediation, and breakthrough changes in fulfilling customer needs made possible through disruptive innovations and/or new technologies.

The two smaller categories of organizations (those with revenues under \$1 billion) highlighted challenges associated with succession plans and talent management. Respondents sense that operational challenges may increase if organizations are unable to recruit and secure a workforce with the skills and expertise needed to implement their growth strategies. This finding is interesting in light of the current unemployment levels and the growing trend of recent college graduates struggling to secure long-term employment. Perhaps there is a mismatch in skills possessed by potential employees and the specialized skills required in today’s high-paced, global and technologically innovative business environment.

Out of the 27 risks, the largest organizations rated all of their top five risks as “Significant Impact” risks, while the other size categories of firms rated almost all their top five risks as “Potential Impact” risks – the exception was the smallest organizations that rated regulatory concerns as a “Significant Impact” risk. The accompanying charts summarize the top-rated risks by size of organization. Only the top five risks are reported.

Revenues \$10B or Greater



2016

2015

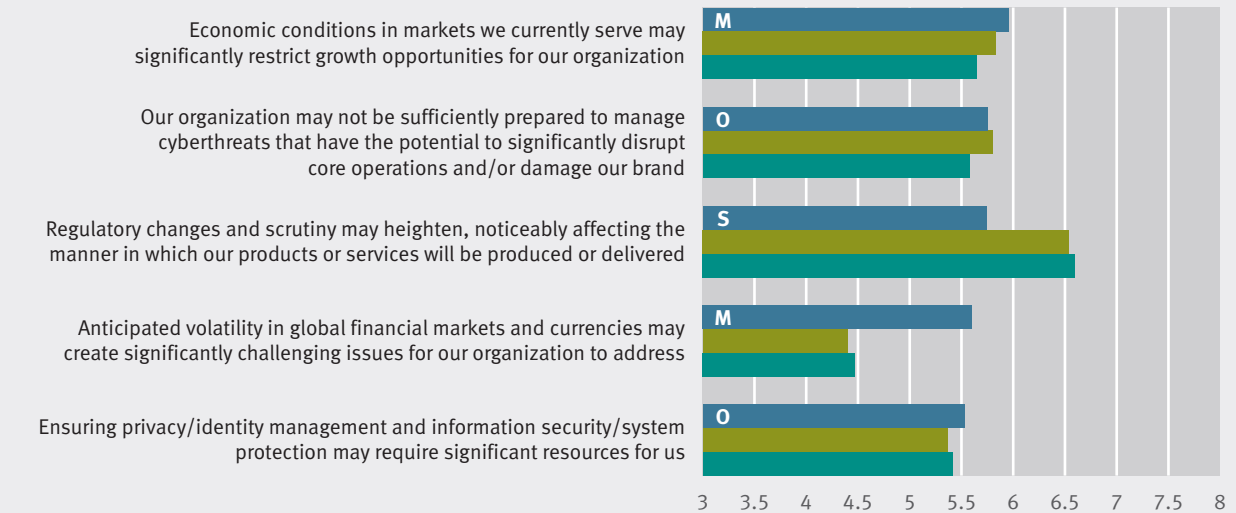
2014

M Macroeconomic Risk Issue

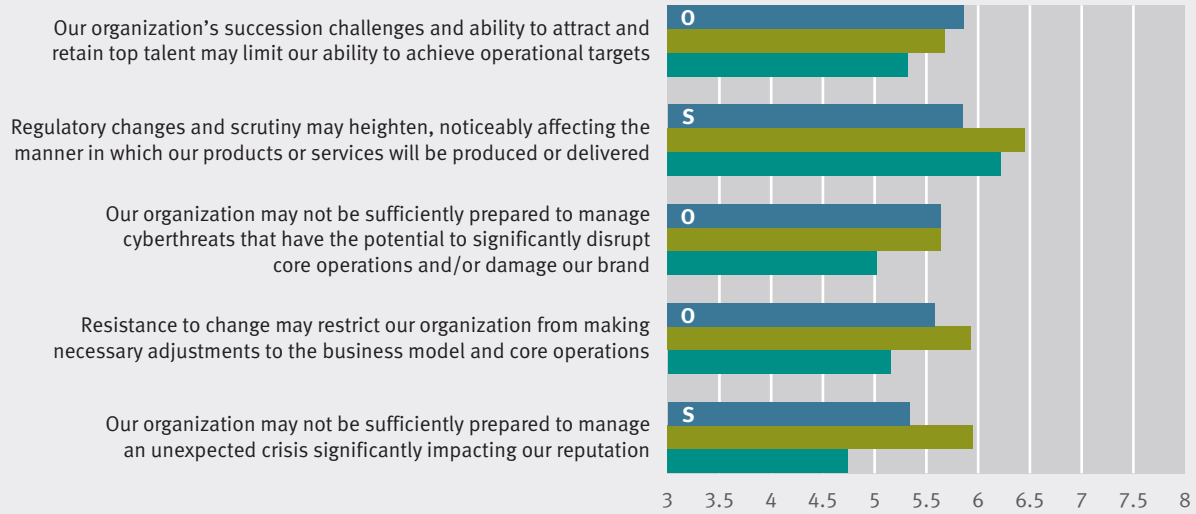
S Strategic Risk Issue

O Operational Risk Issue

Revenues \$1B to \$9.99B



Revenues \$100M to \$999M



■ 2016

■ 2015

■ 2014

M Macroeconomic Risk Issue

S Strategic Risk Issue

O Operational Risk Issue

Revenues Less than \$100M



ANALYSIS ACROSS EXECUTIVE POSITIONS REPRESENTED

We targeted our survey to individuals currently serving on the board of directors or in senior executive positions so that we could capture C-suite and board perspectives about risks on the horizon for 2016. Respondents to the survey serve in a number of different board and executive roles.

Executive Position	Number of Respondents
Board of Directors	19
Chief Executive Officer	44
Chief Financial Officer	37
Chief Risk Officer	142
Chief Audit Executive	107
Chief Information/Technology Officer	84
Other C-Suite ²	57
All other ³	45
Total Number of Respondents	535

To determine if perspectives about top risks differ across executive positions, we also analyzed key findings for boards of directors and the six executive positions with the greatest number of respondents: chief executive officer (CEO), chief financial officer (CFO), chief risk officer (CRO), chief audit executive (CAE), chief information/technology officer (CIO), and other C-suite executives.⁴

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

<i>Overall, what is your impression of the magnitude and severity of risks your organization will be facing with respect to reaching or exceeding profitability (or funding) targets over the next 12 months?</i>	2016	2015	2014
Board of Directors	6.0	5.7	6.3
Chief Executive Officer	6.3	6.1	5.9
Chief Financial Officer	6.1	6.9	6.8
Chief Risk Officer	5.9	5.7	6.5
Chief Audit Executive	6.1	6.2	6.4
Chief Information/Technology Officer ⁵	6.5	N/A	N/A
Other C-Suite	6.0	6.5	6.5

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

³ These 45 respondents either did not provide a response or are best described as executives who do not fall under the other categories. We do not provide a separate analysis for this category.

⁴ We grouped individuals with equivalent but different executive titles into these positions when appropriate. For example, we included “Vice President – Risk Management” in the CRO grouping and we included “Director of Finance” in the CFO grouping.

⁵ In 2016, we had sufficient participation to warrant a separate analysis of individuals serving as Chief Information/Technology Officer. In 2014 and 2015, the CIO/CTO respondents were grouped with Other C-Suite executives due to a small number of observations.

The overall impression among boards of directors, CEOs and CROs about the magnitude and severity of risks in the environment is higher for 2016 relative to 2015, with the views of CEOs growing in concern each year since 2014. CIOs appear to be most concerned, given they rated the magnitude and severity of risks for 2016 at the highest level among all executives. Interestingly, CROs are the least concerned relative to other types of respondents, as reflected by their average response score of 5.9. These differences in perspectives suggest there is value in explicitly discussing and analyzing factors that might be influencing overall impressions about the risk environment among key leaders of organizations, including the board of directors.

As discussed previously, to help identify differences in risk concerns across respondent type, we group all the risks based on their average scores into one of three classifications. Consistent with our prior studies, we use the following color-coding scheme to highlight risks visually using these three categories. Below and on the following page, Table 6 summarizes the impact assessments for each of the 27 risks for the full sample and for each category of executive using the following color code scheme:

- Significant Impact – Rating Equals 6.0 or higher
- Potential Impact – Rating Equals 4.5 – 5.99
- Less Significant Impact – Rating 4.49 or lower

Table 6: Perceived Impact over Next 12 Months – by Role							
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	●	●	●	●	●	●	●
Uncertainty surrounding political leadership in national and international markets may limit our growth opportunities	●	●	●	●	●	●	●
Anticipated volatility in global financial markets and currencies may create significantly challenging issues for our organization to address	●	●	●	●	●	●	●
Our ability to access sufficient capital/liquidity may restrict growth opportunities for our organization	●	●	●	●	●	●	●
Uncertainty surrounding costs of complying with healthcare reform legislation may limit growth opportunities for our organization	●	●	●	●	●	●	●
Anticipated changes in global trade policies may limit our ability to operate effectively and efficiently in international markets	●	●	●	●	●	●	●
Geopolitical shifts and instability in governmental regimes or expansion of global terrorism may restrict the achievement of our global growth objectives	●	●	●	●	●	●	●
Strategic Risk Issues	Board	CEO	CFO	CRO	CAE	CIO/ CTO	Other C-Suite
Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered	●	●	●	●	●	●	●
Our organization may not be sufficiently prepared to manage an unexpected crisis significantly impacting our reputation	●	●	●	●	●	●	●
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	●	●	●	●	●	●	●

Sustaining customer loyalty and retention may be increasingly difficult due to evolving customer preferences and/or demographic shifts in our existing customer base	●	●	●	●	●	●	●
Shifts in social, environmental and other customer preferences and expectations may be difficult for us to identify and address on a timely basis	●	●	●	●	●	●	●
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	●	●	●	●	●	●	●
Opportunities for organic growth through customer acquisition and/or enhancement may be significantly limited for our organization	●	●	●	●	●	●	●
Ease of entrance of new competitors into the industry and marketplace may threaten our market share	●	●	●	●	●	●	●
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	●	●	●	●	●	●	●
Operational Risk Issues	Board	CEO	CFO	CRO	CAE	CIO/CTO	Other C-Suite
Our organization may not be sufficiently prepared to manage cyberthreats that have the potential to significantly disrupt core operations and/or damage our brand	●	●	●	●	●	●	●
Our organization's succession challenges and ability to attract and retain top talent may limit our ability to achieve operational targets	●	●	●	●	●	●	●
Ensuring privacy/identity management and information security/system protection may require significant resources for us	●	●	●	●	●	●	●
Resistance to change may restrict our organization from making necessary adjustments to the business model and core operations	●	●	●	●	●	●	●
Our 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	●	●	●	●	●	●	●
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 existing operations may not be able to meet performance expectations related to quality, time to market, cost and innovation as well as our competitors	●	●	●	●	●	●	●
Risks arising from our reliance on outsourcing and strategic sourcing arrangements, IT vendor contracts, and other partnerships/joint ventures to achieve operational goals may prevent us from meeting organizational targets or impact our brand image	●	●	●	●	●	●	●
Uncertainty surrounding the viability of key suppliers or scarcity of supply may make it difficult to deliver our products or services	●	●	●	●	●	●	●
Our organization may face greater difficulty in obtaining affordable insurance coverages for certain risks that have been insurable in the past	●	●	●	●	●	●	●

Board members appear to be the most optimistic about risk issues, as indicated by their ratings of 17 of the 27 risks at the “Less Significant Impact” level (reflected by the green circles). Boards, CEOs and CROs each rated one of the 27 risks as “Significant Impact” risks, while CFOs, CIOs and other C-suite executives did not rate any risks as “Significant Impact” risks. Interestingly, while CAEs perceive the overall risk environment as decreasing from 2014 to 2016 and rated the most number of risks at the lowest level, they are the only group to identify more than one risk as having “Significant Impact.”

It is noteworthy that the impact of economic conditions in the market was rated as the top risk by both boards of directors and CEOs, and it made the top five risks for all other executives except CAEs. Boards of directors and CEOs rated concerns about economic conditions at the “Significant Impact” level. No other risk was noted by those executives as a “Significant Impact” risk. That these leaders appear to have uncertainty regarding the global economic climate is an important message.

Interestingly, CFOs rated all 27 risks in the middle category (i.e., “Potential Impact” risks), while CEOs and CIOs rated all but one of the 27 risks at that level. In comparing these findings with the views of board members noted above, it appears that unlike board members, these executives see a moderate level of uncertainty in the marketplace related to a number of risk drivers. This interesting disparity of views at the highest levels of the organization suggests CEOs and CFOs are more concerned than board members about the economic recovery and whether it will sustain.

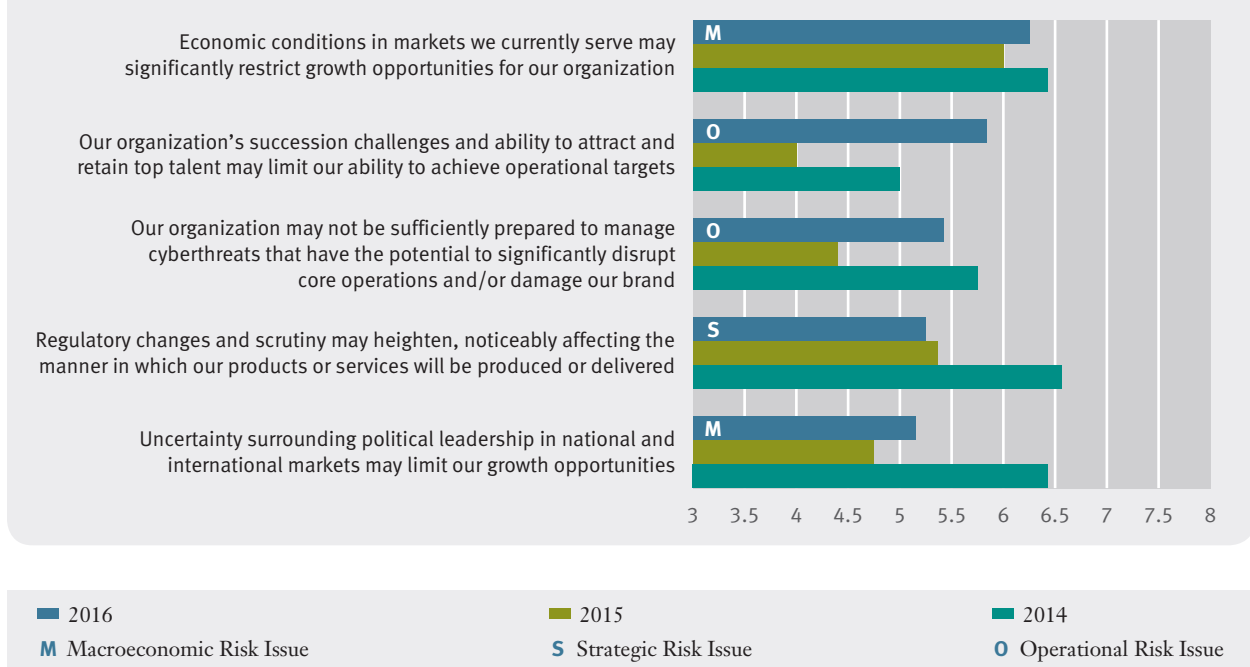
The charts on the following pages highlight the top five risks identified by each executive position. Of particular note is the observation that three of the top five risks for CEOs relate to strategic risk concerns, while boards of directors are more concerned about macroeconomic and operational risks. CFOs, CROs, and CAEs primarily pinpoint operational issues in their top five risks, but only CAEs rate certain operational risks as “Significant Impact” risks. This disparity in viewpoints emphasizes the critical importance of both the board and the management team engaging in risk discussions, particularly when there is a lack of consensus about the organization’s most significant risks. Without clarity of focus, the executive team may not be appropriately addressing the most important risks facing the organization, thereby leaving the organization potentially vulnerable to certain risk events. The disparity may also reflect CEOs taking more of a “big picture” view as other executives focus more on operational issues.

Consistent with the analyses of results for the full sample and across the four size categories provided earlier in this report, concerns about regulatory scrutiny made the top five list of risks for all executives except CFOs and CIOs. CROs and CAEs rate that risk higher than other executives, with both CROs and CAEs rating that risk as a “Significant Impact” risk. Collectively, this suggests most members of the executive team have heightened concerns about uncertainties linked to the overall regulatory environment.

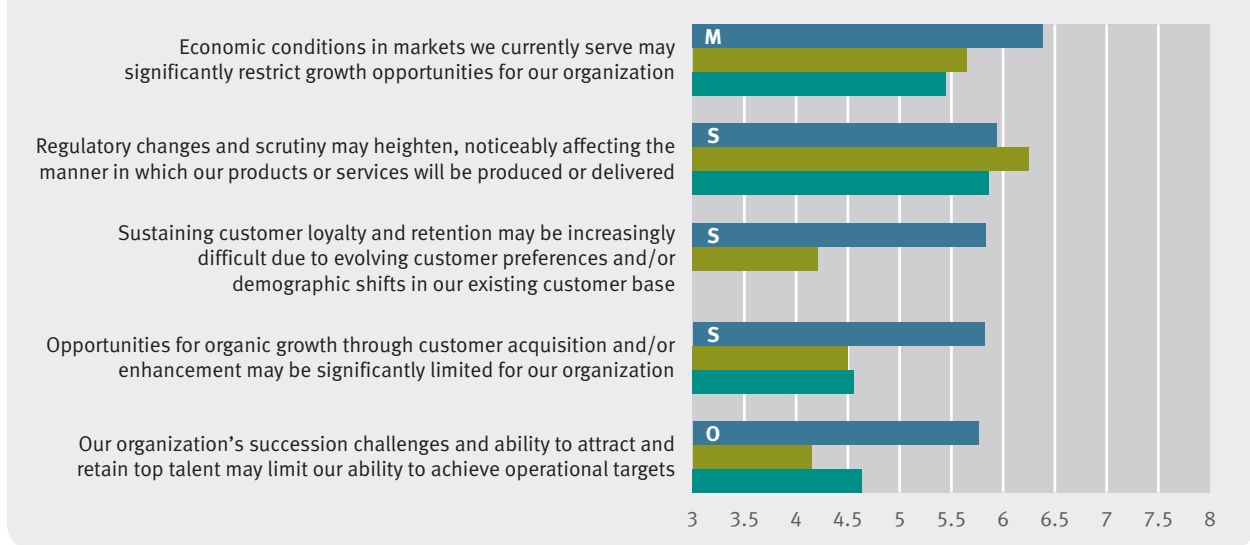
In addition to regulatory changes, concerns related to the organization’s succession challenges and ability to retain top talent increased dramatically for boards and CEOs over 2015, and that risk was also among the top five risk concerns for CROs and CAEs. Similarly, risks related to sustaining customer loyalty and to opportunities for organic growth increased noticeably over 2015 for CEOs, reflecting specific areas of concern from their perspective.

While risk related to cyberthreats is a top risk concern among the full sample, as reported earlier, that risk did not make the top five list of risk concerns for CEOs and CFOs. What was most surprising is that cyberthreats were not included in CIOs’ top five risk concerns. CIOs are mostly focused on macroeconomic and strategic risk issues, with none of their top five risk concerns rated as “Significant Impact” risks. However, boards of directors, CROs, and CAEs believe cyberthreats are a top five risk concern.

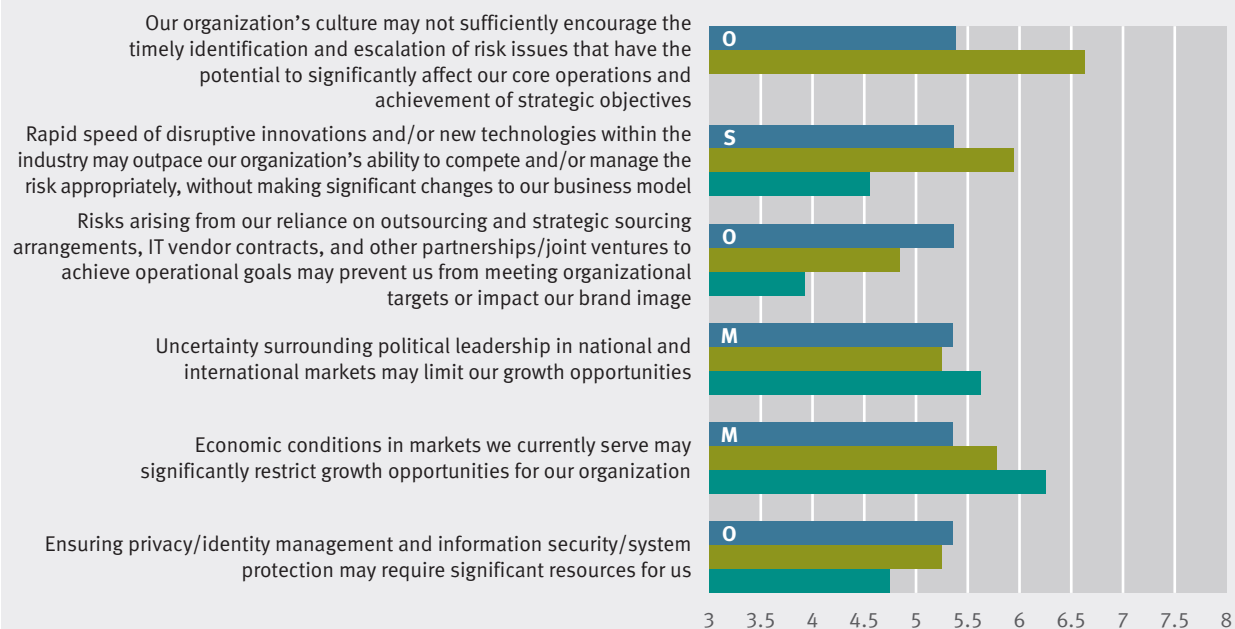
Board Members



Chief Executive Officers



Chief Financial Officers



■ 2016

■ 2015

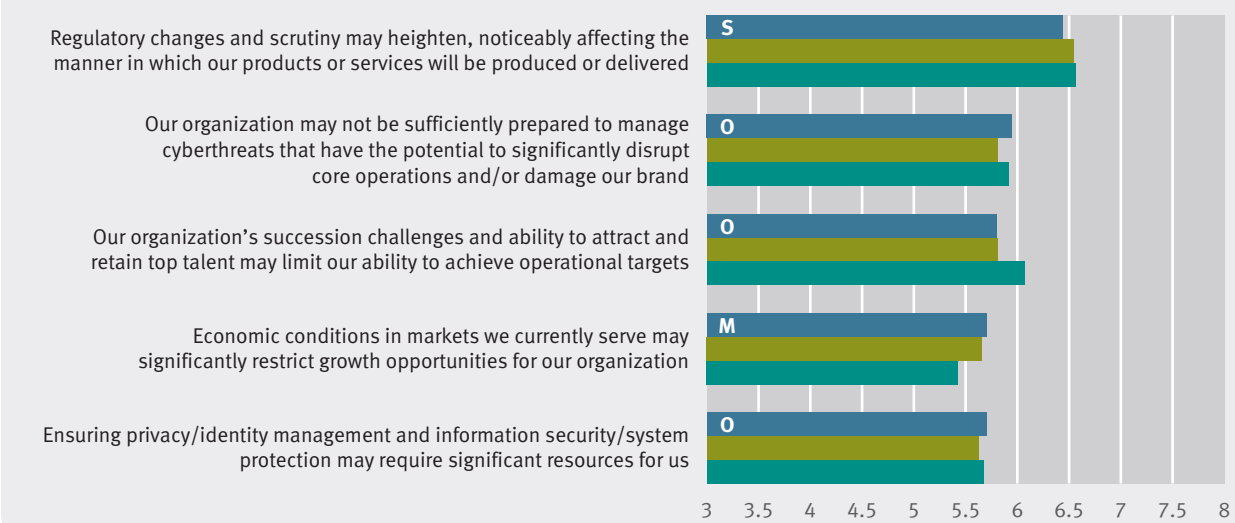
■ 2014

M Macroeconomic Risk Issue

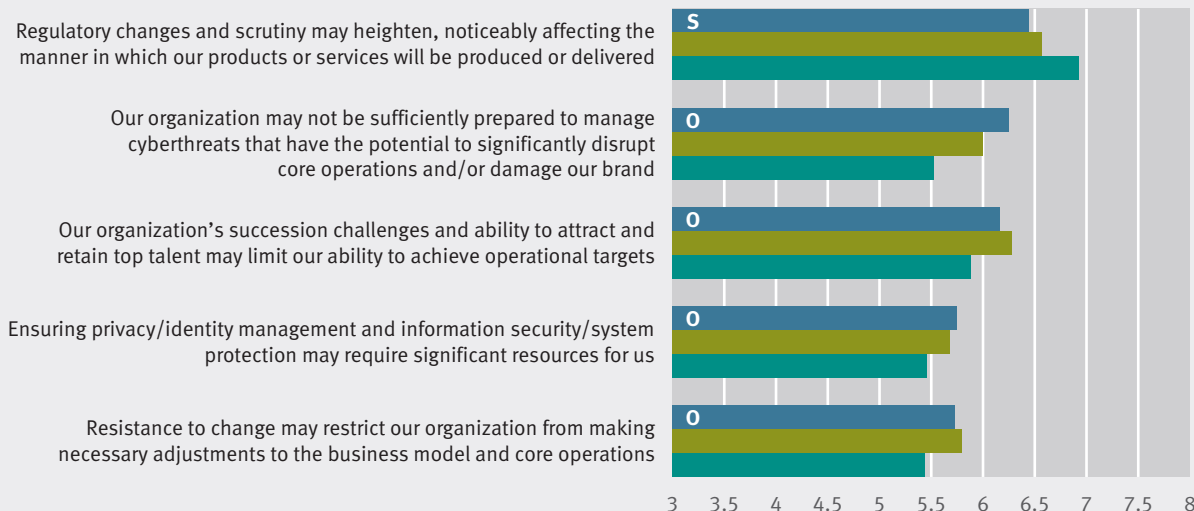
S Strategic Risk Issue

O Operational Risk Issue

Chief Risk Officers



Chief Audit Executives



■ 2016

■ 2015

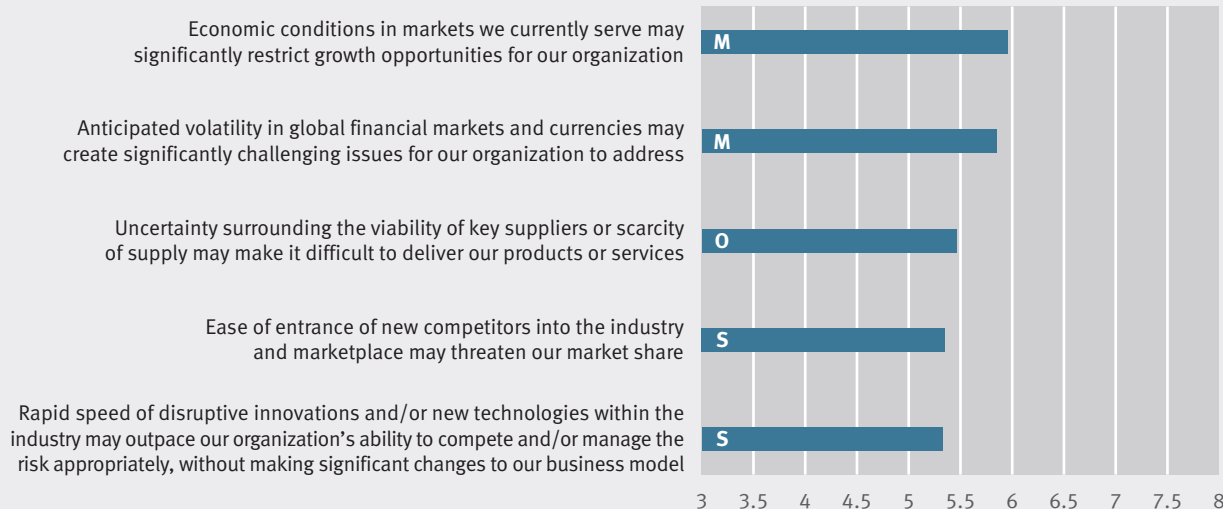
■ 2014

M Macroeconomic Risk Issue

S Strategic Risk Issue

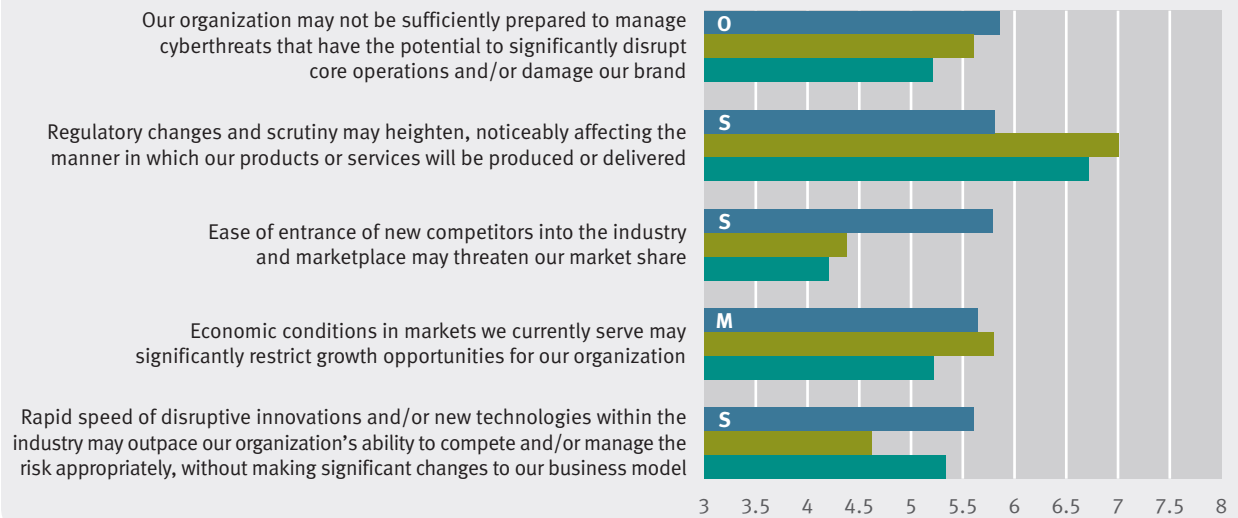
O Operational Risk Issue

Chief Information/Technology Officers



Note: We only report results for 2016 because we did not have sufficient participation from CIOs/CTOs in 2014 and 2015 to warrant separate analysis.

Other C-Suite Executives



2016

2015

2014

M Macroeconomic Risk Issue

S Strategic Risk Issue

O Operational Risk Issue

INDUSTRY ANALYSIS

Respondents to our survey represent organizations in a number of industry groupings, as shown below:

Industry	Number of Respondents
Financial Services (FS)	168
Consumer Products and Services (CPS)	117
Manufacturing and Distribution (MD)*	83
Technology, Media and Communications (TMC)	42
Healthcare and Life Sciences (HLS)	37
Energy and Utilities (EU)	47
Other industries (not separately reported)	41
Total Number of Respondents	535

* In prior years of the survey, this industry group was referred to as Industrial Products.

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

Overall, what is your impression of the magnitude and severity of risks your organization will be facing with respect to reaching or exceeding profitability (or funding) targets over the next 12 months?	2016	2015	2014
Financial Services (FS)	6.0	5.7	6.1
Consumer Products and Services (CPS)	5.9	6.2	6.1
Manufacturing and Distribution (MD)	6.5	6.2	6.3
Technology, Media and Communications (TMC)	6.6	5.8	6.9
Healthcare and Life Sciences (HLS)	6.6	5.5	7.3
Energy and Utilities (EU)	5.9	6.4	6.6

Interestingly, respondents in the Technology, Media and Communications (TMC) and the Healthcare and Life Sciences (HLS) industry groups reflect the most volatility in overall risk concerns across the three years. After both industry groups saw a significant decrease in the overall risk environment from 2014 to 2015, 2016 survey results reflected higher overall risk concern for the two groups. The results are likely due to the uncertainty of rapid change in these industries, as well as increasing regulatory oversight.

Surprisingly, given the sharp decrease in oil prices, the overall risk environment appears to also have lessened each year since 2014 for the Energy and Utilities (EU) industry group, which saw reductions in overall risk scores in both 2015 and 2016 from the 2014 levels. While this result may be a function of the mix of energy and utility organizations in our sample, with some being less impacted by the decline in oil prices, there may be another factor as well. During 2015, oil prices reached their high in May and began a decline of 25 percent into the period in which we conducted the survey. Since that time, prices have fallen another 25 percent from the 2015 peak; therefore, the full impact of this game-changing decline in oil prices may not have been foreseen by those survey participants representing organizations that are most affected by the decline. Through much of this decline, many in the

industry have been in denial and it wasn't until after the survey period closed that many in the industry began to realize the full impact of the decline and that a recovery was not imminent. If the survey were conducted today, we might be seeing different results.

Notably, the level of overall risk concern is mostly tracking in line with 2014 and 2015 levels for Financial Services (FS), Consumer Products and Services (CPS), and Manufacturing and Distribution (MD) organizations.

Table 7 provides an overview of the significance and differences across industries in executive perspectives about each of the 27 risks rated in this study (categorized as macroeconomic, strategic and operational risk issues).

- Significant Impact – Rating Equals 6.0 or higher
- Potential Impact – Rating Equals 4.5 – 5.99
- Less Significant Impact – Rating 4.49 or lower

Table 7: Perceived Impact over Next 12 Months – by Industry						
Macroeconomic Risk Issues	FS	CPS	MD	TMC	HLS	EU
Economic conditions in markets we currently serve may significantly restrict growth opportunities for our organization	●	●	●	●	●	●
Anticipated volatility in global financial markets and currencies may create significantly challenging issues for our organization to address	●	●	●	●	●	●
Uncertainty surrounding costs of complying with healthcare reform legislation may limit growth opportunities for our organization	●	●	●	●	●	●
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	●	●	●	●	●	●
Strategic Risk Issues	FS	CPS	MD	TMC	HLS	EU
Regulatory changes and scrutiny may heighten, noticeably affecting the manner in which our products or services will be produced or delivered	●	●	●	●	●	●
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	●	●	●	●	●	●
Our organization may not be sufficiently prepared to manage an unexpected crisis significantly impacting our reputation	●	●	●	●	●	●
Shifts in social, environmental and other customer preferences and expectations may be difficult for us to identify and address on a timely basis	●	●	●	●	●	●
Growth through acquisitions, joint ventures and other partnership activities may be difficult to identify and implement	●	●	●	●	●	●
Sustaining customer loyalty and retention may be increasingly difficult due to evolving customer preferences and/or demographic shifts in our existing customer base	●	●	●	●	●	●

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	●	●	●	●	●	●
Opportunities for organic growth through customer acquisition and/or enhancement may be significantly limited for our organization	●	●	●	●	●	●
Ease of entrance of new competitors into the industry and marketplace may threaten our market share	●	●	●	●	●	●
Substitute products and services may arise that affect the viability of our current business model and planned strategic initiatives	●	●	●	●	●	●
Operational Risk Issues	FS	CPS	MD	TMC	HLS	EU
Our organization may not be sufficiently prepared to manage cyberthreats that have the potential to significantly disrupt core operations and/or damage our brand	●	●	●	●	●	●
Ensuring privacy/identity management and information security/system protection may require significant resources for us	●	●	●	●	●	●
Our organization's succession challenges and ability to attract and retain top talent may limit our ability to achieve operational targets	●	●	●	●	●	●
Resistance to change may restrict our organization from making necessary adjustments to the business model and core operations	●	●	●	●	●	●
Our 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 existing operations may not be able to meet performance expectations related to quality, time to market, cost and innovation as well as our competitors	●	●	●	●	●	●
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	●	●	●	●	●	●
Uncertainty surrounding the viability of key suppliers or scarcity of supply may make it difficult to deliver our products or services	●	●	●	●	●	●
Our organization may face greater difficulty in obtaining affordable insurance coverages for certain risks that have been insurable in the past	●	●	●	●	●	●

As exhibited by the red circles in Table 7, there are different viewpoints about the most significant risks across industries. No more than two industry groups rated the same risk as a "Significant Impact" risk. Those risks rated at the highest level by two different industry groups include risks related to (1) the rapid speed of disruptive innovation noted by respondents in the Technology, Media and Communications and the Healthcare and Life Sciences industry groups; (2) regulatory changes noted by respondents in the Financial Services and the Healthcare and Life Sciences industry groups; and (3) cyberthreats noted by respondents in the Financial Services and Healthcare and Life Sciences industry groups.

The Healthcare and Life Sciences industry group appears to have the highest level of risk concerns. Respondents in that industry group identified five of the 27 risks as "Significant Impact" risks, with most other risks rated in the middle category of "Potential Impact" risks. Two of those risks for the Healthcare and Life Sciences industry group relate to strategic risk concerns and two relate to operational

concerns. No other industry group rated more than two of the 27 risks as “Significant Impact” risks. The higher number of “Significant Impact” risks for the Healthcare and Life Sciences industry group is not surprising given the continued rapid pace of change affecting healthcare delivery and healthcare insurance, and is likely impacted by U.S.-based organizations facing the uncertainty of the 2016 presidential election, which could lead to a repeal of the current healthcare reform.

The Consumer Products and the Energy and Utility industries are the only industry groups that did not rate any risks as “Significant Impact” risks. The Manufacturing and Distribution industry group is the only one that did not rate any risks at the lowest level.

It is certainly not a revelation that respondents representing Financial Services organizations are most concerned about regulatory changes and threats related to cybersecurity. Manufacturing and Distribution organizations expressed their highest concern about anticipated volatility in global financial markets and currencies and economic conditions in markets they serve. Not surprisingly, respondents from Technology, Media and Communications companies are most concerned about the risk of disruptive innovation. Relative to other industries, the Energy and Utilities industry group reported the most number of risks at the “Less Significant Impact” level, as evidenced by 13 of the 27 risks rated with green circles.

The bar charts on the following pages report the top five risk exposures in rank order for each of the six industry groups. Recall that a risk with an average score of 6.0 or higher is considered a “Significant Impact” risk, while risks with average scores between 4.5 and 5.99 are “Potential Impact” risks and risks with average scores below 4.5 are “Less Significant Impact” risks.

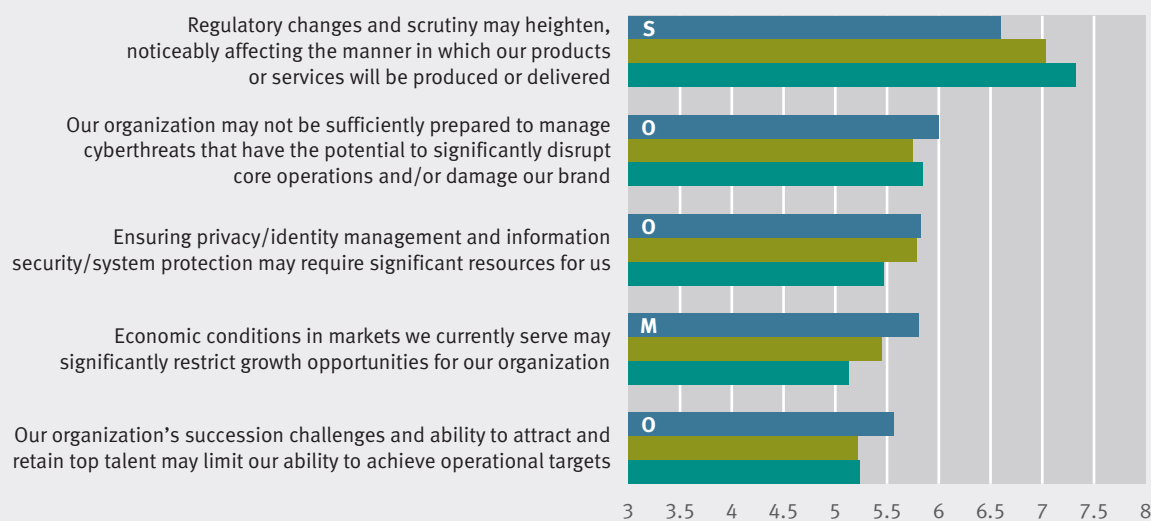
A noticeable observation from these results is the magnitude of concern about risks associated with regulatory change and increased regulatory scrutiny observed by respondents in the Financial Services and the Healthcare and Life Sciences industry groups. While the scores for regulatory change and increased regulatory scrutiny were lower than those in the prior year, both are still above 6.5 and significant in impact.

Regarding the direction of change in risk scores from 2015 to 2016, many scores for 2016 are lower relative to two years ago (2014) for the top five risks across all industries, suggesting the level of risk concern is not as significant as two years ago. However, four of the top five risk scores for 2016 are higher than 2014 scores for the Financial Services and the Manufacturing and Distribution industry groups, and three of the five top risk concerns are higher in 2016 relative to 2015 for the Healthcare and Life Sciences industry group.

There are also differences in categories for the top five risks across the six industry groups examined. The Financial Services and the Technology, Media and Communications industry groups include three operational risks in their top five risk concerns. With some stabilization in macroeconomic conditions, executives in these organizations may now be facing challenges in ensuring that their core operations are sufficiently robust in light of the current world realities. The Energy and Utilities industry group also includes three operational risks in its top five risk concerns. As explained earlier, the decline in oil prices is a game changer and its full impact may not have been fully apparent to survey participants. That said, operational focus remains a priority to sustain sufficient cash flow for companies most affected by the decline. In contrast, the Consumer Products and the Healthcare and Life Sciences industry groups ranked two strategic risk concerns in their list of top five risk concerns.

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

Financial Services



■ 2016

■ 2015

■ 2014

M Macroeconomic Risk Issue

S Strategic Risk Issue

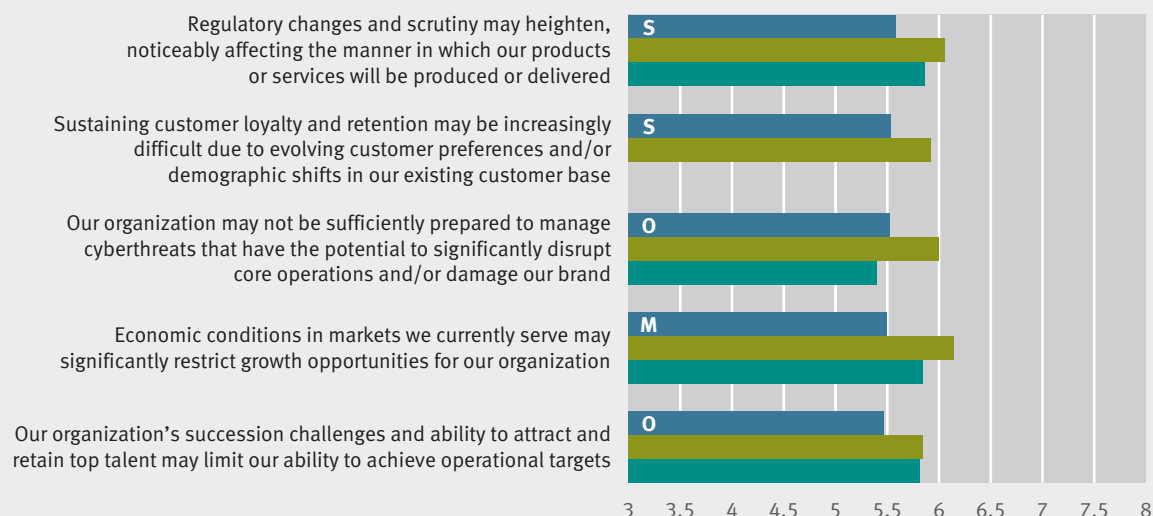
O Operational Risk Issue

While the overall regulatory environment and its perceived impact on Financial Services institutions remain top of mind in 2016, albeit at a declining level for the third consecutive year, other risks – perhaps less obvious – have crept into the 2016 top five risks facing Financial Services organizations. The impact of internal succession options, coupled with concerns over being able to attract and retain top talent, landed this new category in the top five. Survey respondents in the industry also expressed heightened concerns over economic conditions, in a way foreshadowing the extreme volatility experienced in global trading markets in the first quarter of this year.

From a technology perspective, respondents remain highly concerned over the impact of potential cyber events, as well as security and privacy risks in general, with these risk issues increasing in significance over the prior year results. There likely isn't a board or executive committee meeting occurring these days where either the institution's own vulnerabilities and performance against cyberthreats or the impact/lessons to be learned from other external market participants' breaches aren't being discussed. However, dropping from the top five risks facing Financial Services institutions are two risks that we would have expected to be higher – namely, risks from social media and mobile/Internet-based applications, and the risk of disruptive technologies and new innovations impacting the institution's ability to compete. Given all of the discussion and press surrounding Fintech firms (which deliver financial services based on using software and are at the cutting edge of peer-to-peer financial products and services), the level of investment in such firms and the rapidly evolving payments space among other sectors, it is somewhat surprising that these risks have moved lower on the list. Perhaps this is a sign that Financial Services institutions feel they have a better handle on the overall threat these risks may pose or that the speed to impact is perceived to have slowed. Regardless, it will be important to continue to monitor developments in these spaces and we would not be surprised to see them reappear among the top risk issues for the industry group in future surveys.

Interestingly, despite the combination of new risks entering the highest level of respondents' concerns, an ever-present concern over regulatory matters, and higher expectations over the magnitude and severity of risks that Financial Services organizations will face over the next 12 months, respondents quizzically indicated that they will be less likely than the prior year to devote additional time and/or resources to risk identification and management activities over the next 12 months. Perhaps this a reflection on past investments in upgrading risk management capabilities, which would be a "glass half full" scenario. Or, this may reflect either fatigue by executives and boards at the level and sustained pace of such investments and a desire to focus resources on other agendas, such as customer experience, revenue growth and innovation. This latter view is beginning to manifest in the marketplace, where C-suite executives and boards are challenging risk and compliance functions to perform their duties while increasing efficiency or, at the very least, slowing the pace of resource growth.

Consumer Products and Services



■ 2016

■ 2015

■ 2014

M Macroeconomic Risk Issue

S Strategic Risk Issue

O Operational Risk Issue

It is interesting, and a bit surprising, to find substantial consistency this year in the top risks for Consumer Products and Services companies, yet the significance of those risks is lower compared to last year. One possible reason: There is a rise in the likelihood that these organizations plan to devote additional time and resources to risk identification and management, with a notable jump since 2014. It could also signify better understanding and improved education among the board and C-suite executives regarding these risks and how their organizations are managing them. Nevertheless, these risk issues remain critical for Consumer Products and Services organizations to address.

Regulatory changes and scrutiny is an understandably higher risk for Consumer Products companies, even though the industry does not have the level of regulation that Financial Services companies face. Of note, more Consumer Products organizations are integrating elements of other industries into their product and service lines, such as entertainment, communications, mobile devices and healthcare, which opens them up to more regulatory oversight. And with a new U.S. president being elected in November, there is speculation that regulations and oversight of business could change significantly depending on who is elected.

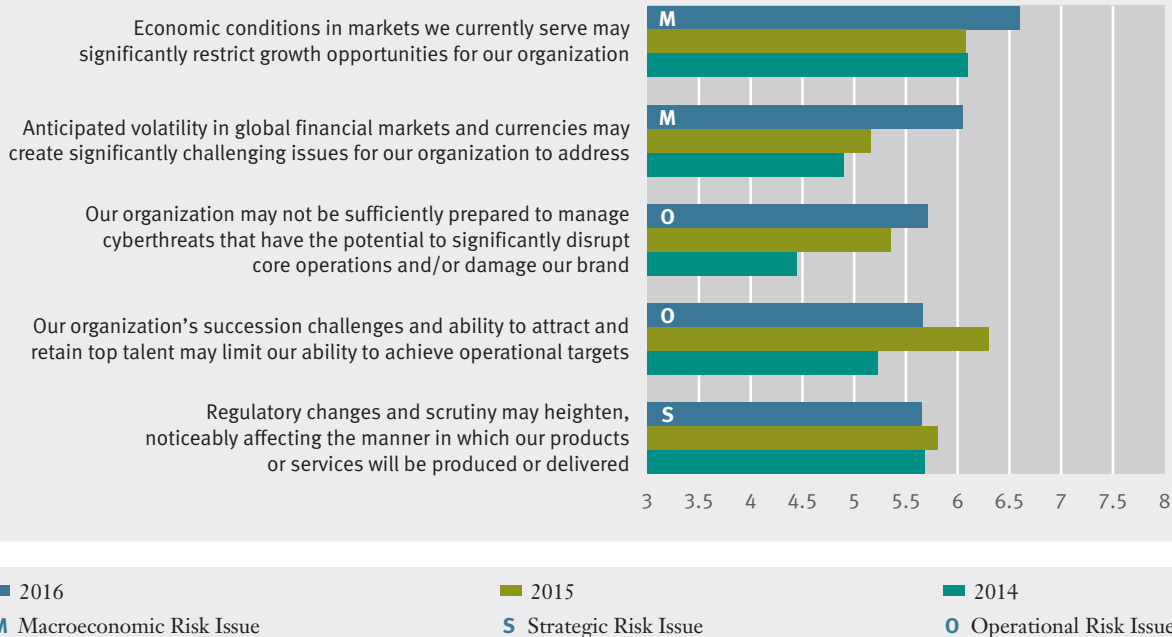
Customer loyalty and retention is, of course, a foundational priority for the industry. Over the last year there was another significant jump in online and mobile shopping. In response, Consumer Products companies are investing more resources in their omni-channel programs to steer their customers to their properties (online and physical) versus large online stores. Omni-channel enables consumers to shop within their preferred channels based on time, location, availability and price, among other factors.

It is well-documented that Consumer Products companies have been the targets of some major cyberattacks in the past few years. Boards and executive management remain very concerned. Among other potential vulnerabilities, the sheer number of payment terminals these organizations manage continually makes them a prime target. Most have now installed new payment terminals to accommodate chip & pin credit cards, as well as terminals with near field payment systems to pay by phone. However, many of these terminals still only read a credit card swipe, which is far less secure. Bottom line, cyberthreats won't disappear as a risk any time soon for consumer-focused companies, which continue to lead other industries in data and privacy losses.

In a positive development, consumer confidence rose significantly in the past year. Recent financial market fluctuations have affected consumer confidence levels, but they are still high compared to just a few years ago. However, Consumer Products companies are monitoring world events closely, which took a toll on the economy and appear to be continuing this year. It would not be surprising to find this risk increasing in significance next year.

Lastly, retaining top talent is a top priority for Consumer Products companies. Unemployment rates are at their lowest levels in years, making the talent recruitment and acquisition process far more challenging than in the recent past. These organizations are focused on keeping their best people.

Manufacturing and Distribution



Not surprisingly, economic conditions rank as the top risk issue for the Manufacturing and Distribution industry group. In fact, industry board members and C-suite executives rank this at its highest level of significance in the past three years of the survey. Global markets remain in turmoil, which has an especially strong impact on these organizations. With the threat of another recession on the horizon during our survey period, board members and executives are concerned.

Closely related to economic uncertainty is volatility in global financial markets. Many Manufacturing and Distribution companies either operate or sell their products – or both – on a global scale. These organizations already are experiencing the effects of financial-related events in China along with falling oil prices worldwide. The coming year appears equally murky, and as the higher risk level for this issue suggests, Manufacturing and Distribution companies have a sense of uneasiness about the markets and the impact they could have on the industry group.

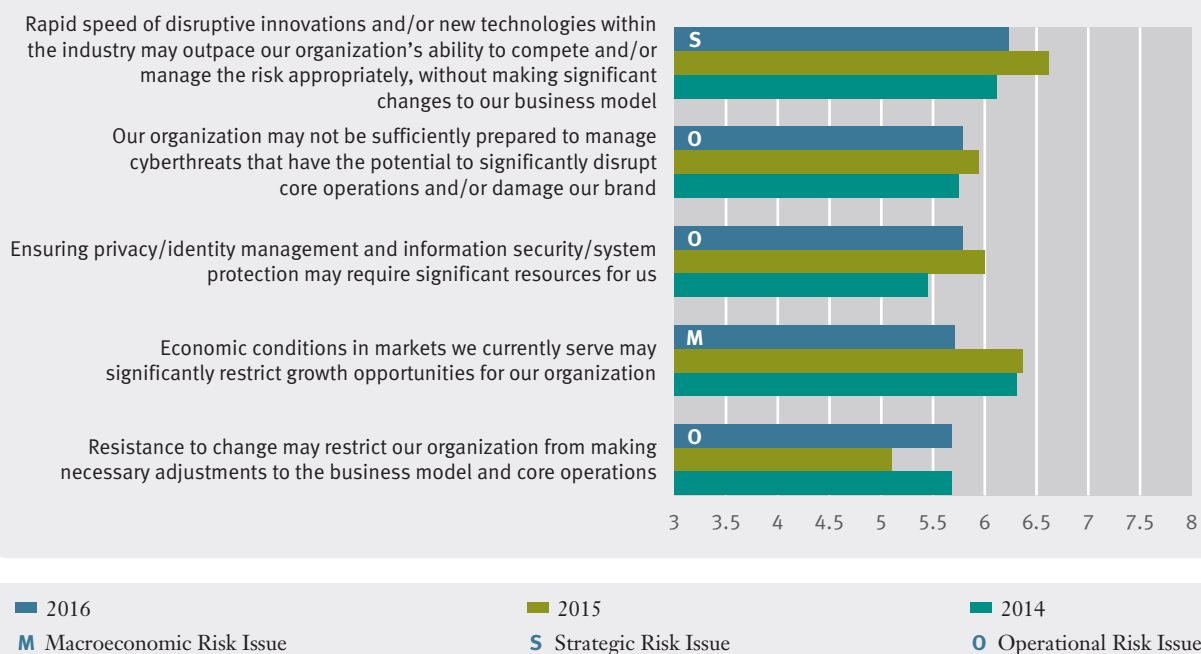
Of note, economic conditions and global financial markets stand out clearly as the top two risks for Manufacturing and Distribution companies. Understandably, more of these organizations are taking initial steps to adopt enterprise risk management, starting with risk assessment projects. They are determining how they can most effectively manage through shakiness in the economy and financial markets.

Cyberthreats represent a new entrant to the list of top risks for Manufacturing and Distribution organizations, which unlike companies in other industries, had not viewed cybersecurity at the same high level of risk in previous years of this study. Manufacturing and Distribution companies do not house the type of customer data – for example, credit card information, social security numbers and other personally identifiable information – that organizations in Financial Services and Consumer Products do. However, the cyber risk environment has changed dramatically. The security of information and intellectual property is now part of virtually every board agenda. Furthermore, cyberthreats now encompass not only data theft, but also the potential takeover of critical systems and infrastructure, along with technology embedded into factories and operations. Without question, cyberthreats are now a critical risk issue for these companies.

Succession-related issues remain a top five risk, as well, though its level of significance dropped this year compared to the 2015 study. In the industry, there was relatively low turnover during the last recession. Last year's spike in this concern likely reflected an improving economy and the risk that key talent would leave the organization. These issues remain, particularly for professionals at the middle management level.

With regard to regulatory changes and scrutiny, there have been no extraordinary changes in the industry. However, Manufacturing and Distribution companies still have a significant compliance burden when it comes to various occupational, environmental, health and safety requirements, along with issues including, but not limited to, conflict minerals and the labor supply chain. Manufacturing and Distribution companies likely see regulations as a long-term issue that will probably rank among their top risks every year.

Technology, Media and Communications



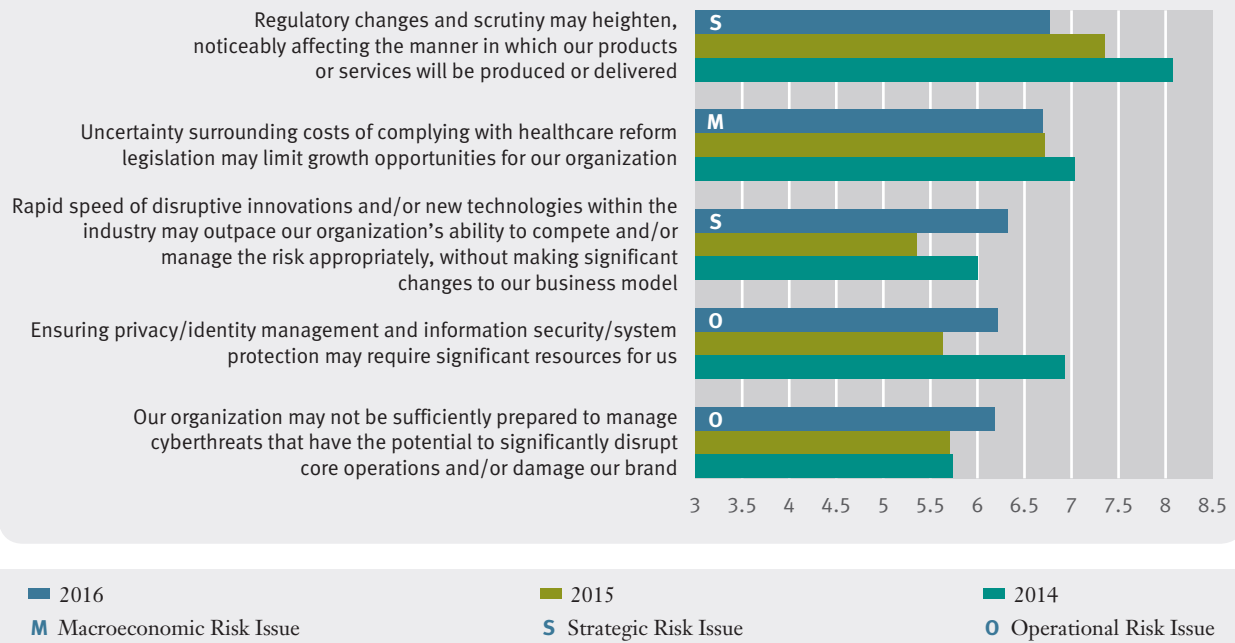
For four of the top five risks, the current year risk ratings are somewhat lower relative to last year and more consistent with 2014. Regarding the top three risk issues – rapid speed of disruptive innovations, cyberthreats and privacy/identity management – the lower results this year likely result from an intense focus by companies on proactively addressing these areas, especially with recruiting talent and undertaking extensive risk management and mitigation efforts. Both privacy/identity management and the rapid speed of innovation decreased minimally in significance over the prior year, yet they clearly remain top-of-mind risk issues for Technology, Media and Communications companies.

Numerous data breaches and successful cyberattacks have resulted in prudent companies and their boards of directors and management teams clearly recognizing the risk and preparing detailed incident response plans to anticipate what may be an inevitable data breach. The survey results mirror observations in the market that Technology, Media and Communications companies are preparing for and managing the risk proactively. The same holds true for ensuring there are adequate resources to address privacy and identity management along with information security and system protection.

Survey respondents indicated that global economic conditions represent a significant risk issue. Numerous factors are contributing to a volatile period in the global economy, particularly at the onset of 2016. While the survey responses are from late 2015, it is likely that today this risk would be judged to be more acute. Companies in this industry group are impacted by global economic conditions given the breadth of the supply chain and the customer base. At the same time, they are buoyed by the level of innovation and the many new products hitting the market. Business transformation initiatives underway to take advantage of the move to digital processes are being driven by the products and services offered by Technology, Media and Communications companies. This is raising confidence levels for long-term success, even amid short-term fluctuations in the economy.

Technology, Media and Communications organizations contend with risks associated with the speed of innovation in the normal course of business. Today, perhaps unlike a decade ago, they understand much better how to prepare and align themselves for change. As a result, it is surprising that respondents indicated that resistance to change is among the top risks for this industry group. Perceptions of this risk may result from concerns that current business models are becoming outdated. Core operations must be able to make changes and adjust rapidly to the market, particularly if the business model is becoming outdated. Similarly, people and culture are critical elements. Without people willing to respond to changing market realities and current customer demands and potentially contribute to a new business model, companies can lose substantial competitive advantage.

Healthcare and Life Sciences



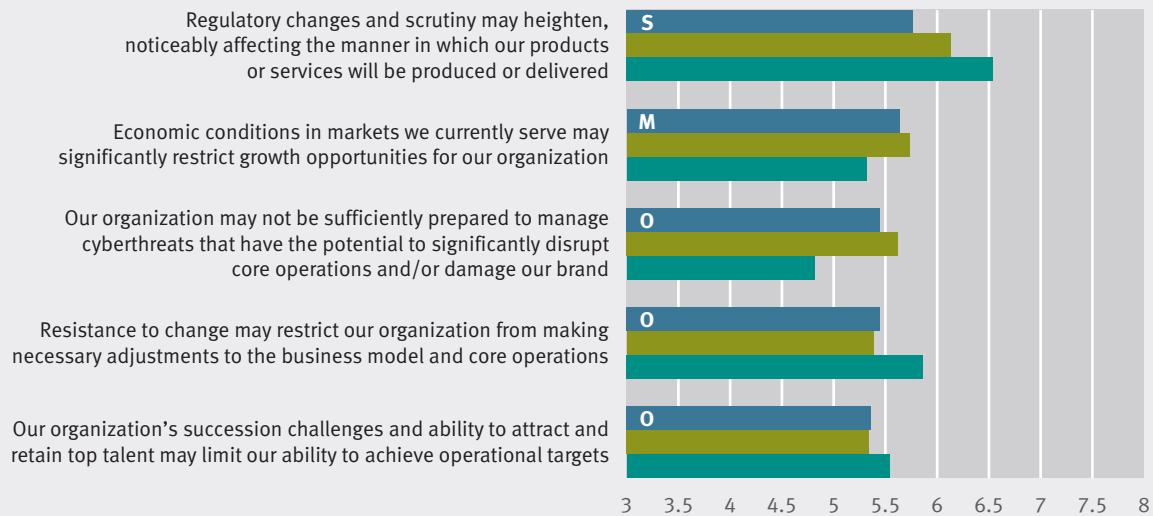
Although the perceived risk level of general legal and regulatory compliance is trending downward for the industry group, it still remains the top overall risk for Healthcare and Life Sciences organizations. Our theory is that this downward trend is a result of a better understanding of the general direction of healthcare reform and what is, and is not, a compliance risk. However, the risk of regulatory changes and scrutiny remains high because, despite this better understanding, Healthcare and Life Sciences organizations continue to grapple with both their strategic and tactical approaches to mitigating these risks.

Healthcare and Life Sciences organizations with robust, mature and demonstratively effective compliance programs are likely in a position of competitive advantage. They are much more able to detect and prevent instances of legal and regulatory noncompliance (presumably saving significant legal, investigatory and sanctions costs). In addition, in the event of one or more incidents of noncompliance, their compliance program will be considered a mitigating factor in the sanctioning phase of the resolution process.

There is no debating that Healthcare Providers face the daunting task of keeping pace with peers in the industry while also trying to perform in a more efficient and effective manner using technologies for maintaining or improving revenue and quality. The ability to utilize technologies with quality business analytics is becoming even more important as Healthcare Providers continue to observe margins shrink and fight hard to maintain a healthy revenue stream. Innovation in the Healthcare industry continues to push the boundaries of how care is provided. Providers that are unable to analyze and diagnose improvement opportunities will struggle to maintain a healthy revenue stream. Furthermore, those that implement and employ technologies for process improvement and efficiencies will have to invest in various technologies that are often disparate, do not communicate effectively (or at all) with other systems, and often lack good dashboards for executives to make informed decisions.

To further complicate matters, if not managed effectively, compliance risk may rise as new technologies and innovations are implemented, since Healthcare organizations tend to focus on implementation success versus risk management oversight of other consequences that may prevail. Also, better informed and more tech-savvy patients are creating pressures to evolve at a rapid pace. In turn, Healthcare Provider organizations are struggling to ensure their sensitive data is being accessed appropriately and is protected sufficiently. New cybersecurity and privacy/identity risks emerge on a seemingly daily basis and are top of mind for executive leadership across Healthcare Providers, Payers and Service organizations alike. The rise of cyber insurance has led to a false sense of security for some; however, the reputational damage from a significant breach may prove too great to put a price on. With looming government HIPAA audits and increased scrutiny on the horizon, these pressures will only continue to increase.

Energy and Utilities



■ 2016

■ 2015

■ 2014

M Macroeconomic Risk Issue

S Strategic Risk Issue

O Operational Risk Issue

Despite widespread upheaval produced by extreme declines in oil prices globally, this year's top risks for the Energy and Utilities industry group are consistent with those from 2015, which may be a measure of the experience, competence and steadiness of boards and executive management to address these concerns.

Although many oil and gas companies basically understand the risk environment they face, until recently, they also may have remained in denial about the potential extent of extraordinary declines in oil prices. Across the entire Energy and Utilities industry group, some risk scores in the survey actually declined this year compared to the 2015 results. This likely occurred for two reasons: The full extent of oil's price drop had not yet occurred when this survey was conducted in the fourth quarter of 2015, and a decline in oil prices does not generally have a net negative effect on most utilities. However, with the subsequent fall of an additional 25 percent in oil prices following the survey period, many companies now find their operational, liquidity and survival options significantly constrained.

If this survey had been conducted in the first quarter of 2016, economic conditions almost certainly would have been rated as the top risk confronting Energy and Utility companies. Oil prices in the \$30 per barrel range, combined with a consensus outlook that no significant price rebound is anticipated for an extended period, have forced many companies to replace growth with survival as their top objective. Risk response steps being implemented virtually across the board include large-scale layoffs, major reductions in capital spending, asset sales, restructurings, and bankruptcy filings. For very large energy companies with strong balance sheets, along with risk-tolerant private equity investors and funds, these circumstances produce a wide range of opportunities, as they are well-positioned to endure the current uncertainty in the industry. But there is no clear indicator yet as to when a point of price-risk advantage will be seen.

Regulatory change and scrutiny remains the top risk identified by Energy and Utility companies for the fourth consecutive year. While concerns about regulatory actions to restrict hydraulic fracturing, expand health and safety requirements, and increase environmental enforcement directed at oil, gas and utility operations continue, banking regulations also have begun affecting many oil and gas companies. For example, as oil prices remain low and the value of assets collateralizing bank loans sinks below outstanding loan principals, regulators frequently require lending institutions to withdraw credit, forcing companies to take extreme financial measures to stay afloat.

After a significant rise on the risk scale in 2015, cybersecurity remains a critical risk this year, albeit at a slightly reduced level. Energy and Utility companies are fully aware of the cyber risk environment, as well as the imperative to marshal management and board attention, top technological solutions, and increased investment to protect against criminal, competitive and nation-state threats. In comparison with oil and gas companies, utilities have relatively high public visibility, expansive – and often aged – infrastructure and data networks, and the need to be responsive to regulatory oversight. This continues to drive high levels of cybersecurity protection activities in their organizations.

ANALYSIS OF DIFFERENCES BETWEEN PUBLIC AND NON-PUBLIC ENTITIES

Participants in the survey represent three types of organizations: publicly traded companies (166 respondents), privately held for-profit entities (250 respondents), and not-for-profit and governmental organizations (119 respondents).

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

<i>Overall, what is your impression of the magnitude and severity of risks your organization will be facing with respect to reaching or exceeding profitability (or funding) targets over the next 12 months?</i>	2016	2015	2014
Public Companies	6.3	6.3	6.6
Privately Held For-Profit Companies	6.2	5.8	6.3
Not-for-Profit and Governmental Organizations	5.7	5.7	6.5

While the overall magnitude and severity of risks for public companies and not-for-profit and governmental organizations remains consistent with 2015, privately held for-profit companies saw a sizeable increase in overall risk levels for 2016. Thus, the slight increase in overall risk concerns for the full sample in 2016 is likely attributable to private organizations.

Consistent with the overall survey response, all types of organizations are concerned about regulatory change and scrutiny, as this represents a top five risk for all types of organizations. And, all three types of organizations rated risks related to cyberthreats as a top five risk concern. Given the reliance on technology and the Internet to conduct business for almost all enterprises, concerns about cyber risks cannot be ignored.

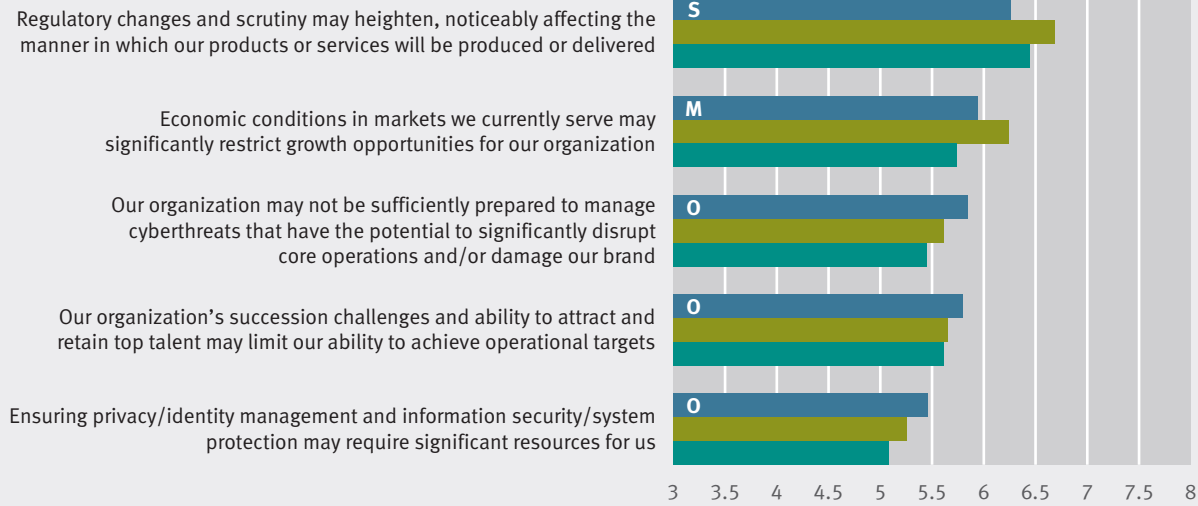
Both public and private for-profit companies are concerned about the impact economic conditions might have on their ability to grow, and both public and not-for-profit organizations identified concerns related to succession planning as a top five risk issue for this year.

While on an overall basis respondents from not-for-profit organizations do not feel the general risk environment is as severe as public and privately held for-profit companies (see table above), they still believe that specific risks they face create significant challenges for their organizations. When asked about specific risks, not-for-profit organizations rated three of the top five risks as “Significant Impact” risks (i.e., average scores of 6.0 or higher). Notably, these organizations identified their culture as an impediment to the timely identification of risks as a “Significant Impact” risk. In contrast, only one of the top five risks for public and private companies are rated as “Significant Impact” risks.

While public and not-for-profit organizations identified a strategic risk as their most impactful, operational risk concerns dominated the list of top five risks, indicating a significant concern about these organizations’ ability to effectively manage and provide core business processes necessary for operations. Similarly, private companies included two operational risk concerns in their list of top five risk concerns.

The 2016 risk scores for the top five risks are mostly higher than the scores from the previous year for public companies and privately held for-profit companies, and most of these risks are scored higher this year than in 2014.

Public Companies



2016

2015

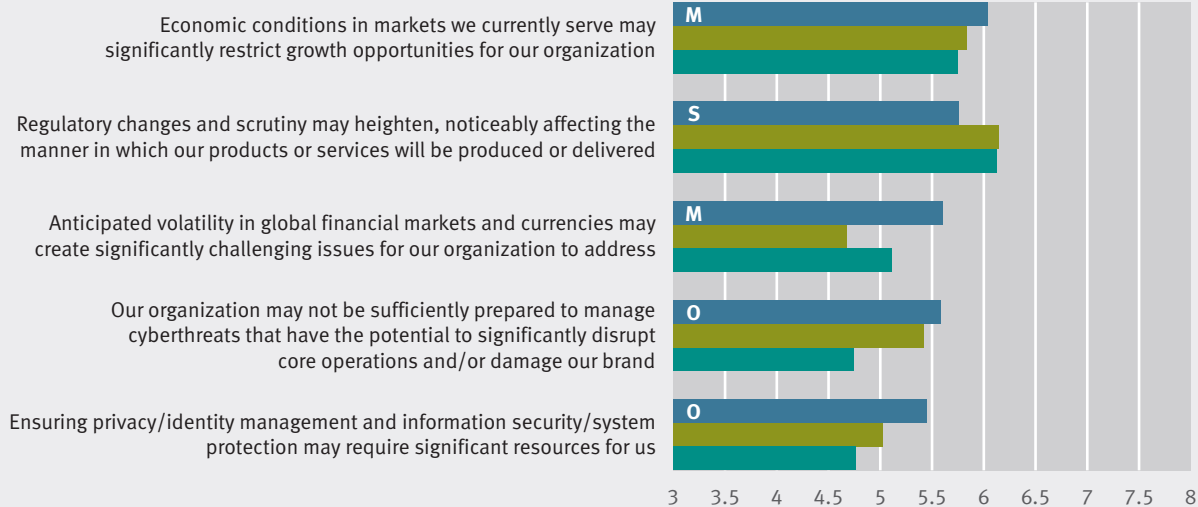
2014

M Macroeconomic Risk Issue

S Strategic Risk Issue

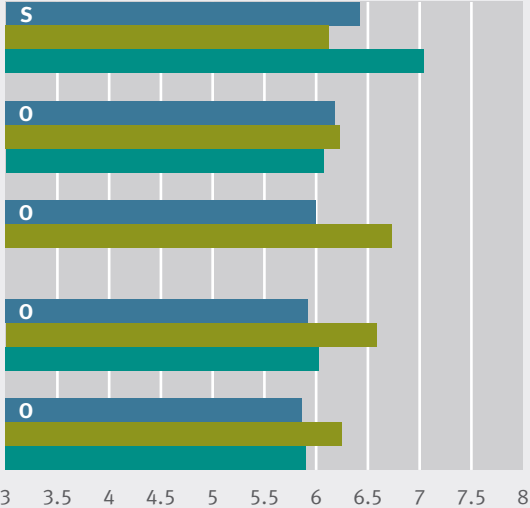
O Operational Risk Issue

Private Companies



Not-for-Profit and Governmental Organizations

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



2016

2015

2014

M Macroeconomic Risk Issue

S Strategic Risk Issue

O Operational Risk Issue

ANALYSIS OF DIFFERENCES BETWEEN U.S. AND NON-U.S. ORGANIZATIONS

Participants in the survey are fairly evenly distributed between U.S.-based organizations (250 respondents) and organizations based outside the United States (285 respondents).

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

<i>Overall, what is your impression of the magnitude and severity of risks your organization will be facing with respect to reaching or exceeding profitability (or funding) targets over the next 12 months?</i>	2016	2015	2014
U.S.-Based Organizations	6.0	5.9	6.3
Organizations Based Outside the U.S.	6.2	6.1	6.7

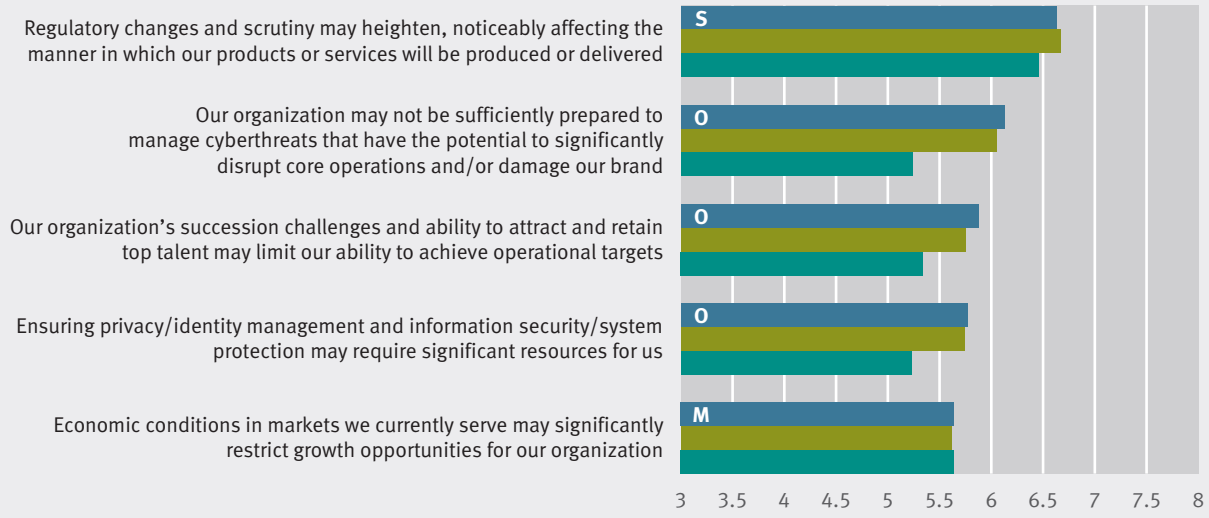
Globally, organizations agree that the overall magnitude and severity of risks facing the organization are on a slight uptick from 2015, although both measures are below the 2014 results.

U.S. respondents believe risks related to regulatory changes and heightened regulatory scrutiny represent the top risk concern, ranking this along with concerns about cyberthreats as “Significant Impact” risks. In contrast, organizations based outside the United States continue to rank economic conditions as a “Significant Impact” top five risk concern. In fact, U.S.-based companies ranked economic conditions a half point lower in significance. This ranking likely would be higher if this study had been conducted in early 2016 rather than the fourth quarter of 2015. For U.S. organizations, three of the top five risk concerns relate to operational risks, while for non-U.S. organizations the top two risks are macroeconomic-related and two are strategic.

For U.S. organizations, the top five risks are the same top five as those noted last year; however, non-U.S. organizations identified three new top five risks. Anticipated volatility in global financial markets was identified as the second most impactful risk and ease of entrance of new competitors into the industry was identified as the fifth most impactful risk. The other new top five risk for non-U.S. organizations represents concerns related to cyberthreats.

While the average risk scores differ between U.S. and non-U.S. organizations, three of the risks included as top five risks are the same for U.S.-based and non-U.S.-based organizations, suggesting the types of risks organizations face are similar at a global level. Regardless of geographic location, organizations face challenges related to regulatory scrutiny, economic conditions, and preparedness for cyberthreats.

U.S.-Based Organizations



2016

2015

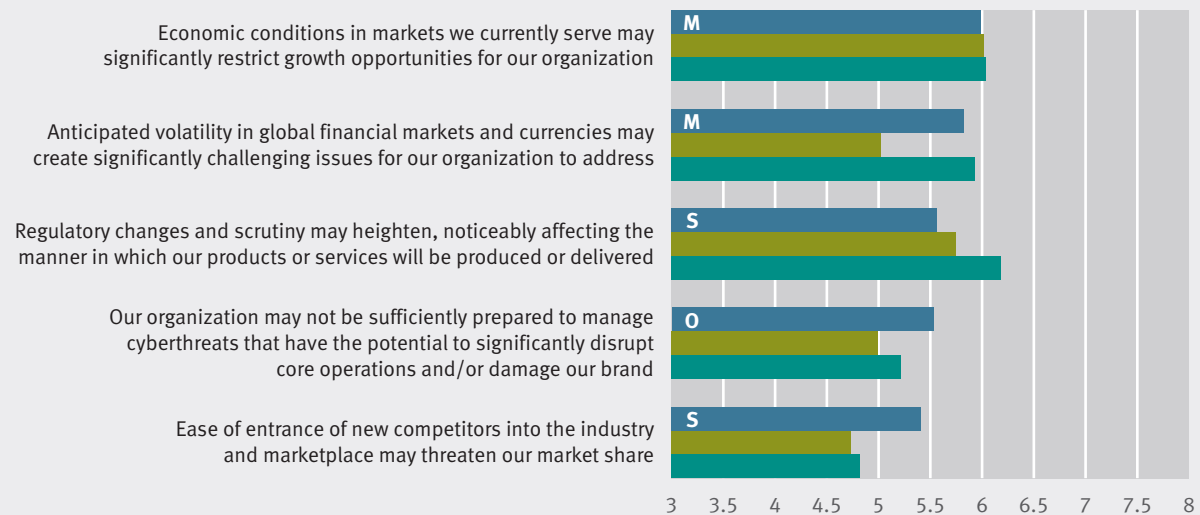
2014

M Macroeconomic Risk Issue

S Strategic Risk Issue

O Operational Risk Issue

Organizations Based Outside the U.S.

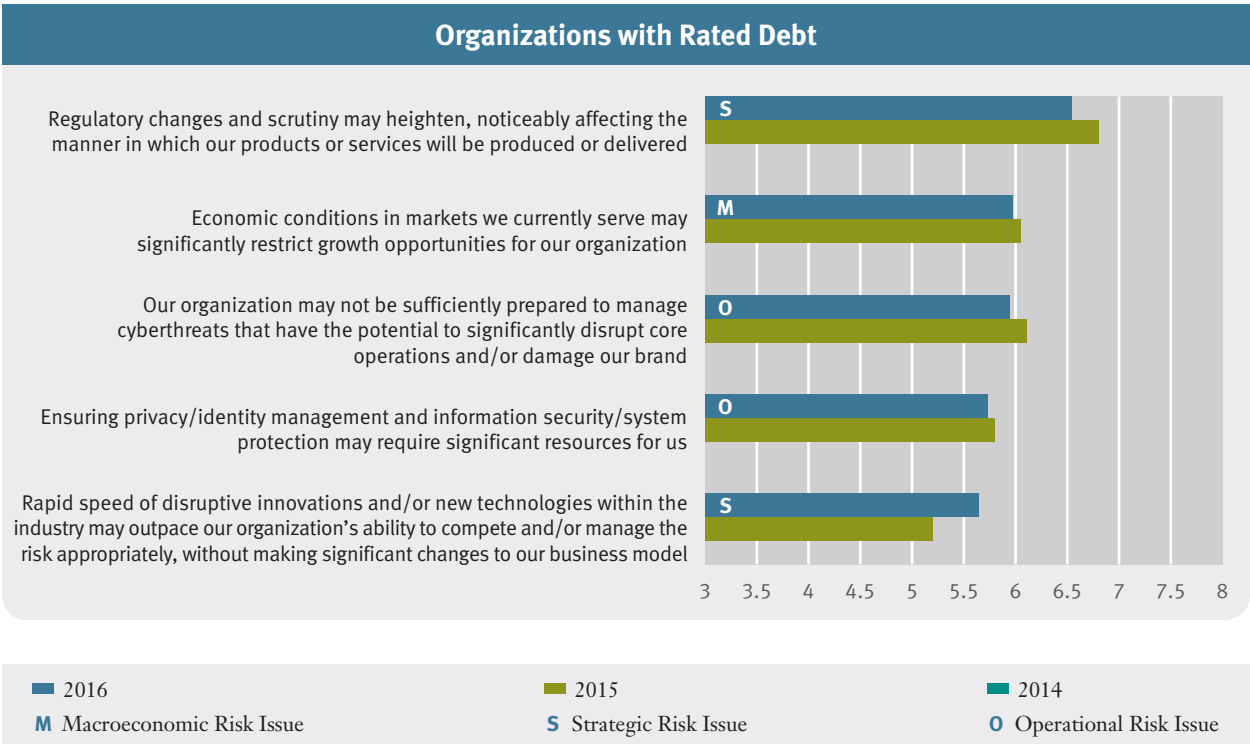


ANALYSIS OF DIFFERENCES BETWEEN ORGANIZATIONS WITH AND WITHOUT RATED DEBT

We also asked participants to indicate whether their organizations have rated debt outstanding, whereby the major credit rating agencies evaluate the overall riskiness of the enterprise and the organization’s risk oversight processes as part of the entity’s overall credit score. We are particularly interested in observing how organizations with rated debt perceive their overall risk environment in light of the explicit focus of rating agencies on the management and governance processes, including enterprisewide risk management.

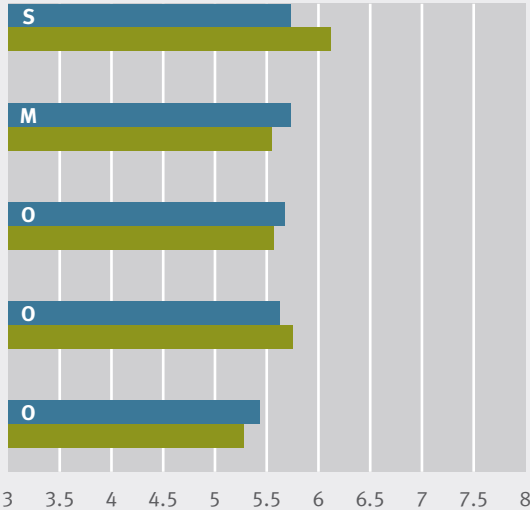
Two hundred and six participants in the survey represent organizations with rated debt outstanding, while 285 respondents represent organizations without rated debt. Forty-four respondents indicated “I’m not sure” in response to this question. The 206 organizations in our study with rated debt outstanding include 93 public companies, 65 private companies and 48 governmental or not-for-profit organizations. While we do not have the respective data for 2014, we separately report the survey results for 2016 and 2015 for rated debt outstanding organizations and those without rated debt in the bar charts below.

Both types of organizations rank the risk related to regulatory changes and scrutiny as the top risk concern. They also both ranked concerns about economic conditions and cyberthreats as their second and third highest risks, respectively. Consistent with other data previously summarized in this report, operational risks dominate the list of top five risk concerns for organizations with and without rated debt outstanding. Organizations with rated debt rated two of their risks as “Significant Impact” risks.



Organizations without Rated Debt

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



2016

2015

2014

M Macroeconomic Risk Issue

S Strategic Risk Issue

O Operational Risk Issue

PLANS TO DEPLOY RESOURCES TO ENHANCE RISK MANAGEMENT CAPABILITIES

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

The likelihood of deploying more resources to risk management dipped slightly in 2016 from 2015 for the full sample, as represented by the average score of 6.1 for 2016, compared to 6.2 for 2015 and 5.7 for 2014. Overall, organizations are sensing a need for enhanced risk oversight processes.

Likelihood that the organization plans to devote additional resources to risk management over the next 12 months	2016	2015	2014
	6.1	6.2	5.7

For 2016, there appears to be a good match between plans to deploy additional resources on risk management processes and the overall impression of the risk environment for the year. Unlike prior years, there is no disconnect between the perceived magnitude and severity of risks to be faced and the likelihood of investing additional resources in risk management efforts.

Overall, what is your impression of the magnitude and severity of risks your organization will be facing with respect to reaching or exceeding profitability (or funding) targets over the next 12 months?	2016	2015	2014
	6.1	6.0	6.4

The Manufacturing and Distribution industry group shows the greatest increase in likelihood to invest more in risk oversight over the next year relative to 2015. That finding is not surprising given the significant bump in risk concerns about economic conditions and anticipated volatility in global financial markets noted for this industry group. The Financial Services and the Healthcare and Life Sciences industry groups continue to note a desire for enhanced risk management capabilities, as signaled by their 6.4 and 6.2 scores, respectively, in the table below.

Likelihood that the organization plans to devote additional resources to risk management over the next 12 months																				
Full Sample			Financial Services			Consumer Products and Services			Manufacturing and Distribution			Technology, Media and Communications			Healthcare and Life Sciences			Energy and Utilities		
2016	2015	2014	2016	2015	2014	2016	2015	2014	2016	2015	2014	2016	2015	2014	2016	2015	2014	2016	2015	2014
6.1	6.2	5.7	6.4	6.9	5.9	6.2	6.0	5.5	6.0	5.4	5.3	5.8	5.6	5.5	6.2	6.2	6.1	5.5	5.8	5.7

We also analyzed responses to this question across different sizes of organizations – those with revenues in excess of \$1 billion signaled they are most likely to deploy additional resources to risk management. These firms are perhaps most exposed to external scrutiny and/or regulatory pressure to continue strengthening their risk management. Not surprisingly, smaller organizations are not as likely to increase their investment in risk management relative to last year.

Likelihood that the organization plans to devote additional resources to risk management over the next 12 months														
Full Sample			Revenues Less than \$100M			Revenues \$100M – \$999M			Revenues \$1B – \$9.99B			Revenues \$10B or Greater		
2016	2015	2014	2016	2015	2014	2016	2015	2014	2016	2015	2014	2016	2015	2014
6.1	6.2	5.7	5.7	6.0	5.3	6.0	6.7	5.4	6.3	5.9	5.8	6.3	6.4	6.4

For-profit organizations indicate an increased likelihood that they will be devoting additional resources to risk management over the next 12 months. The lower likelihood of not-for-profit and governmental organizations to invest additional resources in risk management is a bit surprising given those respondents rated three of their top five risks as “Significant Impact” risks. Not-for-profits focus on preserving brand reputation, and governmental organizations at all levels focus on identifying and managing risk as well as preserving the public trust. Risks to these organizations can relate to a variety of issues, including fraud, waste, misuse of assets, inadequate monitoring of investments, incomplete or unreliable information, and violation of legal requirements, not to mention reputation loss.

Likelihood that the organization plans to devote additional resources to risk management over the next 12 months											
Full Sample			Publicly Traded Companies			Privately Held, For-Profit Enterprises			Not-for-Profit and Governmental Organizations		
2016	2015	2014	2016	2015	2014	2016	2015	2014	2016	2015	2014
6.1	6.2	5.7	6.1	6.2	5.5	6.3	6.1	5.6	6.0	6.6	6.0

Interestingly, CFOs indicated a substantial increase in likelihood to invest additional resources in risk management relative to other executives, while boards of directors and CEOs indicated similar levels as 2015. This finding may reflect the reality that most of the expectations for effective risk oversight from regulators, stock exchanges and rating agencies are directed at boards of directors who, in turn, place expectations on the CEO. CFOs and CIOs indicated the greatest likelihood to devote additional resources relative to all other executives (recall we do not have data for CIOs in 2015 or 2014). While CROs and CAEs did not reflect an increase, as a group they continue to rate highly the need to invest in additional risk management resources.

Likelihood that the organization plans to devote additional resources to risk management over the next 12 months																							
Full Sample			Board Members			CEOs			CFOs			CROs			CAEs			CIOs/CTOs			Other C-Suite		
2016	2015	2014	2016	2015	2014	2016	2015	2014	2016	2015	2014	2016	2015	2014	2016	2015	2014	2016	2015	2014	2016	2015	2014
6.1	6.2	5.7	6.4	6.5	5.1	6.2	6.2	5.0	6.3	5.7	5.7	6.0	6.5	6.5	5.9	6.2	4.9	6.3	N/A	N/A	6.3	6.0	5.6

CALL TO ACTION – EVALUATE AND IMPROVE THE RISK ASSESSMENT PROCESS

This report provides insights from 535 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, slightly more so than in 2015 but improving relative to views expressed in 2014. There is a mixture in risks that increased or decreased over the prior year, suggesting that there continue to be changes in the risk profile as well as a number of uncertainties in the marketplace for 2016 and beyond.

Because of the rapid pace of change in the global business environment, executives and boards of directors must maintain an active dialogue and discussion concerning potential risks to the organization. They also should collaborate to conduct a periodic assessment of risks on the horizon to best position their organizations for a proactive versus reactive response to risks that may emerge and potentially impact, both positively and negatively, their ability to execute their strategies to achieve profitability and funding objectives. To accomplish these objectives, board members and management can use the following key questions as a diagnostic to evaluate and improve their risk assessment process:

- Is management periodically evaluating changes in the business environment to identify the risks inherent in the corporate strategy? Is the board sufficiently involved in the 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?
- Is there an understanding of the threats in the business environment that could derail the execution of the organization's strategy? Are these risk factors monitored over time to provide executive management and the board early warning?
- Does management apprise the board in a timely manner of significant risks or significant changes in the organization's risk profile? Is there an effective process for identifying emerging risks? Does it result in consideration of response plans on a timely basis?
- Is the board aware of the most critical risks facing the company? Are board members cognizant of management's risk concerns? Does the board agree on why these risks are significant? Do directors understand the organization's responses to these risks? Is there an enterprisewide process in place that directors can point to that supports management's answers to these questions, and is that process effective in informing the board's risk oversight on a timely basis?
- Does the organization's risk assessment process engage the appropriate executives and stakeholders to ensure that all appropriate risk perspectives are understood and considered?
- 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 it formulates and executes its strategy?
- Are risks evaluated in the context of the strategy and incorporated as a key consideration in the organization's decision-making processes on an ongoing basis over time?
- Does the organization's risk culture facilitate an open, positive dialogue on identifying and evaluating opportunities and risks, including the escalation of significant risk issues warranting attention by executive management and the board on a timely basis?

These and other questions can assist organizations in refining their processes to better define their specific risks and inform risk management and board risk oversight. We hope this report provides important insights about perceived risks on the horizon for the coming year and beyond, and serves as a catalyst for improving and updating assessments of risks and risk management capabilities within organizations.

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

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ABOUT PROTIVITI

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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).

NC STATE Poole College of Management
Enterprise Risk Management Initiative

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