Global Risk Management Survey

Executive Summary

2017





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Introduction

We live in an era of unprecedented volatility. Trends across three major dimensions—economics, demographics, and geopolitics—combined with the exponential pace of technology change, are converging to create a challenging new reality for organizations around the world. While these forces create new and sometimes unforeseen opportunities, they also create new risks, which must be managed, often in new ways.

Against this backdrop, Aon's 2017 Global Risk Management Survey is designed to offer organizations the insights necessary to compete in this increasingly complex operating environment.

Conducted in the fourth quarter of 2016, the bi-annual survey gathered input from nearly 2000 respondents at public and private companies of all sizes and across a wide range of industries globally, making it Aon's largest to date and one of the most comprehensive surveys globally. The 2017 findings from the web-based survey underscore that companies are grappling with new risks and that we lack consensus on how to best prioritize and respond to them.

For the second time running, damage to brand and reputation emerged as the top-ranked risk in our survey. Political risk/uncertainties has re-entered the top 10 this year and cyber risk climbed into the top five. The connection between these two risks has been highlighted by a series of events during 2016 driven by an increase in organized cyber-crime, which directly impacted government institutions, political parties and global infrastructures.

The interconnected nature of risk is underscored by two other risks in our top 10, namely the **failure to attract and retain top talent** and the **failure to innovate**. There is no question that organizations are under intense pressure to attract and retain talent and to maximize the productivity of their people. Companies that cannot appropriately motivate and incentivize their workforce will quickly fall behind their competition.

At Aon, we believe in the power of data and analytics, combined with expert insight, to provide clients with innovative solutions that help them manage volatility, reduce risk and realize opportunity. We complement this data driven insight with robust business intelligence, such as the Global Risk Management Survey; we hope you find this year's results insightful and actionable.

If you have any questions or comments about the survey, or wish to discuss the survey further, please contact your Aon account executive, or visit aon.com/2017GlobalRisk.

Best regards,

Greg Case
President and CEO

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Executive Summary

When it comes to political risks, one stereotypically thinks of conflicts in emerging or frontier markets—wars in the Middle East; military coups, regime changes or territorial disputes in Asia and Africa; or election turmoil in Latin America. However, this perception no longer holds true, and the trend is shifting.

Nowadays, wherever one goes, be it Krakow, or Singapore, some of the perpetual conversation topics among business people are inevitably related to the Brexit negotiations; the elections in the Netherlands, France and Germany; President Donald Trump and his immigration and U.S.-centric trade policies; as well as South Korea's presidential impeachment. Interestingly, developed nations, which were traditionally associated with political stability, are becoming new sources of volatility and uncertainty that worry businesses, especially those in the emerging markets.

Globalization is no doubt a contributing factor. It has driven greater connectivity, enabling people, goods and services to move freely improving the quality of life, especially for people in the developing world. However, globalization has also triggered backlash from those who have been left behind, prompting populist leaders in the West to pull back and protect what they believe is in their national interest. Thus, the rising economic and ideological nationalism in the West, coupled with different brands of nationalistic fervor stoked up by political leaders in Russia, China, the Philippines and Turkey, have sparked concerns for potential trade wars, stock and currency market crashes, territorial disputes and military conflicts.

Such sentiments are reflected in Aon's 2017 Global Risk Management Survey, where political risk/ uncertainties has emerged as a top concern for global organizations. Ranked at number 15 in 2015, political risk/uncertainties has re-entered the Top 10 risk list. Regionally, organizations in Asia Pacific and Latin America rank the risk much higher than those in North America, probably due to concerns about the inward-looking policy platforms and protectionism that could harm businesses in their regions.

Aon's biennial web-based survey, one of our many efforts to help organizations stay abreast of emerging issues relating to risk management, features analyses and detailed facts and figures gleaned from 1,843 organizations. Participants who represent 33 industry sectors in 64 countries and regions have been asked to identify and rank key risks that their organizations are facing.

In this survey, we have gathered the largest number of participants since its inception in 2007. This large pool of responses has enabled us to gauge the latest trends in risk management more accurately. Some of our discoveries are encouraging, but others are worrisome. For example, despite the availability of more data and analytics, and more mitigation solutions, surveyed companies are less prepared for risk. Risk-preparedness is at its lowest level since 2007. With the fast speed of change in a global economy and increasing connectivity, the impacts of certain risks, especially those uninsurable ones, are becoming more unpredictable and difficult to prepare for and mitigate.

Top 10 risks vs. top news headlines

Aon's 2017 Global Risk Management survey has revealed a host of daunting challenges driven by today's divisive and yet interdependent environment. The report focuses on the selected Top 10 risks for detailed discussion, one of the perennial highlights:

- 1. Damage to reputation/brand
- 2. Economic slowdown/slow recovery
- 3. Increasing competition
- 4. Regulatory/legislative changes
- 5. Cyber crime/hacking/viruses/malicious codes
- 6. Failure to innovate/meet customer needs
- 7. Failure to attract or retain top talent
- 8. Business interruption
- 9. Political risk/uncertainties
- 10. Third party liability (inc. E&O)

Before examining these risks, let's look back at some of the major news events that dominated the headlines during a 12-month period before our survey was conducted. It is an interesting exercise to check the Top 10 risk lists against major news stories in 2016 and see how external factors influence and shape participants' risk perceptions:

- Stock market rallies—Argentina (45 percent), Brazil (39), Canada (17.5), Indonesia (15), Norway (18), Russia (52), the U.K. (14.4), and the U.S. (13.4).
- The U.S. economy grew 1.6 percent for all of 2016.
- Large corporations faced massive product recalls and government investigations.
- Catastrophic flooding, earthquakes and hurricanes hit China, Italy, Ecuador and countries in the Caribbean.
- Syrian government forces recaptured Aleppo.

- The U.K. voted to quit the European Union.
- The pound fell to a 31-year low against the U.S. dollar.
- Hacked emails of the U.S. Democratic National Committee.
- Violent attacks in Brussels, Istanbul, Nice, and Orlando.
- Sports Authority and Aeropostale filed for bankruptcy, and other large retailers closed stores.
- China admitted that its economy was still facing downward pressure.
- Donald Trump was elected President of the United States.
- The U.S. Federal Reserve hiked short-term interest rates.
- Hackers attacked Dyn, several web giants lost access.
- Jobless rates in the U.S. and in the Euro zone fell.
- North Korea conducted nuclear and ballistic missile tests.
- Brazil and South Korea impeached their presidents.

By comparing the two lists, it is easy to see their correlations: An increasing number of high-profile product recalls, scandals, and the popularity of news on social media have heightened organizations' exposure to reputational risk. At the same time, buoyant stock markets worldwide and the Fed's interest hike indicated an improved economic outlook. However, such modest gains in the global economy became somewhat disconnected from the economic reality, especially as consumer spending and business investment remained weak, and the downward pressure in large nations such as China, India and Brazil continued. Therefore, economic slowdown/slow recovery still weighs heavily on the minds of global business leaders.

In addition, cyber risk stands out as another illustration of the influence of news events on risk perception. The high-profile attacks on Dyn and email leaks relating to the Democratic National Committee inevitably elevated cyber risk to number five. Participants in North America, where most of the large-scale hacking events took place, rank the risk at number one. Meanwhile, globalization and technological developments intensified business competition, forcing traditional stores such as Sports Authority and Aeropostale into bankruptcy. The large number of natural and manmade disasters around the globe increased the risks of business interruption.

The new faces of old risks

The majority of the top risks identified in the survey are nothing new to risk managers. However, a closer examination has revealed many new driving factors that are now transforming the traditional risks, adding new urgency and complexity to old challenges.

Take "damage to reputation" as an example. Over the past few years, while defective products, fraudulent business practices or corruption continue to be key reputation wreckers, new media technologies have greatly amplified their negative impact, making companies more vulnerable. In the age of Twitter or viral videos, damage to reputation could occur because of an inappropriate tweet by an executive. or a video by an employee complaining about sexual harassment or discrimination. On a related note, fake news, which started as a way to influence elections on social media, has begun to spill over to the corporate world. A made-up story about a pizzeria in Washington D.C. led to gun violence on its premises in December 2016, after the story was widely circulated online. Therefore, because of these new variables, damage to reputation/ brand has maintained its number one spot, even though it was predicted in 2015 to be number five.

At the same time, cyber crimes have evolved from stealing personal information and credit cards to staging coordinated attacks on critical infrastructures. For example, a series of attacks on the distributions systems of three energy companies in Ukraine presented another more devastating and lethal side of cyber attacks. Cyber threat has now joined a long roster of traditional causes—such as fire, flood and strikes—that can trigger business interruptions because cyber attacks cause electric outages, shut down assembly lines, block customers from placing orders, and break the equipment that companies rely on to run their businesses. This explains the dramatic rise in ranking, from number nine in 2016 to number five this year. For survey participants who are risk managers, they have voted it a number two risk, probably because cyber breaches are becoming more regulated, with many companies in the U.S. and Europe facing mandatory disclosure obligations. Similar requirements are being introduced in Europe and elsewhere. As a result, cyber concerns will continue to dominate the risk chart.

As for talent attraction and retention, businesses in North America and Europe have always faced challenges caused by an aging population, low birthrates, and a declining unemployment rate during economic recovery. Governments in those regions used to pursue highly skilled immigrants as a temporary fix, but the new restrictive immigration policies and rising anti-immigrant sentiments could reverse the gains and further aggravate talent shortages.

As these traditional risks are evolving, organizations can no longer rely on their traditional risk mitigation or risk transfer tactics. They have to work closely with management and explore new ways to cope with these new complexities.

New entrants

In the 2017 survey, we have added disruptive technologies/innovation as a new risk category and participants have ranked it number 20. In 2020, it is predicted to be number 10 globally, number two for the technology industry, and number three for the telecommunications and broadcasting industries.

The term disruptive technology first appeared in a book written by Harvard Professor Clayton Christensen, who categorized technologies as "sustaining" and "disruptive." While the former produces incremental improvements in the performance of established products, Christensen said the latter "tends to reach new markets, enabling their producers to grow rapidly, and with technological improvements to eat away at the market shares of the leading vendors."

A **report** by the McKinsey Global Institute recently identified 12 technologies that could drive truly massive economic transformations and disruptions in the coming years. Among the list are advanced robotics, energy storage, 3D printing and the internet of things. The report estimates that applications of the 12 technologies could have a potential economic impact of between USD 14 trillion to USD 33 trillion a year in 2025. Some of the innovations, said the report, could profoundly disrupt the status quo, alter the way people live and work, and rearrange value pools. With such significant impact, it is not surprising that participants project this risk to be number 10 in three years.

Disruptive technologies/innovation doesn't simply apply to the technology sector. In fact each industry has its own potential disruptors and there are many unknowns out there. According to Jeffrey Baumgartner, who authored "The Way of the Innovation Master", far-sighted companies do not ignore radical new inventions that threaten to disrupt their markets. It is critical that business and policy leaders understand which technologies will matter to them, and prepare accordingly. They either chase the market by

quickly changing their strategies and products to maintain their place in the same marketplace, or explore new markets based on their expertise.

Another new entry to Aon's list of key risks is major project failure, which, the International Project Leadership Academy estimates, could cost the global economy hundreds of billions of dollars annually. Surveyed organizations rank it number 15 and those in Asia Pacific even list it number 10 because a major project failure could potentially undermine a company's reputation, and in many cases, put a company on the brink of a bankruptcy.

While major project failure is sometimes caused by external factors—such as regime change, government policy adjustment, terrorist attacks or a natural disaster—experts also attribute it to internal elements, such as failures related to market and strategies, organizational planning, leadership and governance, underestimation in analysis, quality, risk prediction, skills and competency, and teamwork and communications. Mitigating the risk of a major project failure requires coordinated efforts of a whole organization.

Key drops on the top risk list

Property damage, which was ranked number 10 in Aon's 2015 survey, has slipped to number 13. This could reflect changing priorities. Political risk/ uncertainties has understandably taken on a new urgency. But for surveyed organizations in North America, it still stands at number 10 because continued threats of natural catastrophes such as Hurricane Matthew, the strongest and the deadliest natural catastrophe of the year, and a number of other severe weather events there incurred very high losses for businesses. In fact, economic losses from Hurricane Matthew amounted to USD 8 billion; a hailstorm in Texas USD 3.5 billion, and flooding in Louisiana and Mississippi, USD 10 billion. In Canada, wildfires sparked the biggestever loss for Canada's insurance industry, with economic losses reaching USD 3.9 billion.

Two related risks have dropped in ranking in the 2017 survey—distribution or supply chain failure has fallen from number 14 to number 19, the lowest since 2009, when it was in the top 10; failure of disaster recovery plan declined from number 21 to 28. Their declines in ranking could be driven by the fact that they overlap with business interruption, which is rated number eight. Their low rankings could also lead to the assumption that these risks are underrated. In view of growing economic nationalism, disruption or supply chain failure should be higher on participants' lists as reliance on historical tax and trade agreements are no longer certain.

Divergence in company sizes, regional and participant role priorities

This year's survey has revealed some divergent perspectives. While surveyed companies with revenues of over USD 1 billion have selected damage to reputation/brand as their top risk, smaller organizations are more concerned about economic slowdown and increasing competition. The same is true with cyber crime/hacking/viruses/ malicious codes—larger companies see it as their second highest risk, but smaller companies rank it much lower. Meanwhile, political risk/uncertainties has not even entered the Top 10 list for smaller companies, making one wonder about the wider impact of this risk.

For breakdown by region, damage to reputation/brand, economic slowdown/slow recovery and regulatory/legislative changes are the three risks that all participants agree to include in the Top 10 priorities. All regions except Latin America have chosen increasing competition, failure to innovate, and cyber crime/hacking/viruses/malicious codes for their Top 10. Latin America seems to be grappling with a different set of priorities. In a climate in which public trust in corporations is near an all-time low due to a series of corruption scandals, there is a growing awareness by companies there of the need to engage in community and philanthropic projects

in order to rebuild trust. That explains why corporate social responsibility/sustainability and environmental risk are ranked high in Latin America. Two other issues, exchange rate fluctuation and cash flow/liquidity risk, are related to the drastic economic slowdown that has plagued the region in recent years.

Surprisingly, business interruption is not considered a Top 10 risk by companies in the Middle East & Africa, which have historically seen higher exposure to incidents that interrupt business operations. Exchange fluctuations and directors/officers' personal liabilities have increased in importance.

Failure to attract and retain talent hasn't made it into the Top 10 list in Europe or Latin America. As the workforce shrinks (due to an aging population) and immigration policies become more restrictive, it is slightly worrisome that companies in those two regions have not seen it as a top risk.

As expected, CEOs and CFOs rank very high those risks with strong concrete financial implications— economic slowdown/slow recovery and damage to reputation/brand, while risk managers worry more about cyber security and political risk/ uncertainties. Such diverse views illustrate the importance of gathering a cross section of stakeholders in the decision-making process since each one can bring a different perspective. It is also imperative that senior executives and the board of directors communicate with risk managers, and take an active role in assessing and overseeing the company's risk exposure to ensure it is in line with the company's strategic goals.

Projected risks

2017 Тор 10	2020 Projected Top 10	Change
1. Damage to reputation/brand	Economic slowdown/slow recovery	↑
2. Economic slowdown/slow recovery	Increasing competition	1
3. Increasing competition	Failure to innovate/meet customer needs	1
4. Regulatory/legislative changes	Regulatory/legislative changes	\longleftrightarrow
5. Cyber crime/hacking/viruses/malicious codes	Cyber crime/hacking/viruses/malicious codes	\longleftrightarrow
6. Failure to innovate/meet customer needs	Damage to reputation/brand	\
7. Failure to attract or retain top talent	Failure to attract or retain top talent	\longleftrightarrow
8. Business interruption	Political risk/uncertainties	1
9. Political risk/uncertainties	Commodity price risk	↑
10. Third party liability (inc. E&O)	Disruptive technologies/innovation	1

In its latest economic outlook report, the International Monetary Fund points out:

After a lackluster outturn in 2016, economic activity is projected to pick up pace in 2017 and 2018, especially in emerging market and developing economies. However, there is a wide dispersion of possible outcomes around the projections, given uncertainty surrounding the policy stance of the incoming U.S. administration and its global ramifications. Notable negative risks to activity include a sharper than expected tightening in global financial conditions that could interact with balance sheet weaknesses in parts of the euro area and in some emerging market economies, increased geopolitical tensions, and a more severe slowdown in China.

With such a murky and uncertain economic outlook, economic slowdown will continue to remain a top concern in 2020. A related risk, commodity price fluctuations, is meanwhile projected to re-enter the Top 10 list. Meanwhile, political risk/uncertainties will likely rise due to a more divisive political environment in Europe and the U.S., the geopolitical tension in Asia, the threats of ISIS, the raging civil war in Syria, and the chaos on the Korean Peninsula.

In addition, as we have discussed in the previous section, disruptive technologies/innovation is expected to enter the Top 10 list.

Risk management department and function

The majority of organizations in the survey report having a formal risk management / insurance department in place. The larger a company's revenue, the more likely it has a formal risk management department. Regardless of whether the organization has a risk management department or not, responsibility for risk aligns most often with the finance department or the chief executive/president. Risk management department staffing levels have remained static, with 75 percent of respondents saying that they maintain one to five employees. Respondents have also indicated on a subjective scale that they feel risk management is still undervalued within their organizations.

Approach to risk management, risk assessment and cross-functional collaboration

Seventy-six percent of respondents say they have adopted either a formal or partially formal approach to risk oversight and management at a board level. Large companies, with annual revenue greater than USD10 billion tend to take more formalized approaches to governance, with the board of directors or a board committee establishing policies on risk oversight and management (96 percent). The result is an expected one since many of these organizations are likely publically traded, and subject to disclosure requirements on their risk oversight and management practices.

Nearly 71 percent of respondents say that their organizations engage in cross-functional collaboration in risk management, but the process is still too exclusive and more parties need to be brought to the table for input.

When examining the methods for identifying and assessing risk, a large majority of respondents say they use two or more methods to execute these processes.

In this survey, respondents are also asked to rate on a scale of one to 10 how proactively their organizations identify, assess and manage risks. The average score is six, which equates to "need improvement." While these results illustrate a solid commitment to a proactive approach to risk management across survey respondents, they also suggest the existence of an "effectiveness gap" when evaluated together with other findings in the survey.

Key controls and mitigation

Less than a quarter of survey respondents report tracking and managing all components of their Total Cost of Risk or TCOR. This downward trend is troubling as it is difficult to manage what is not measured. If this basic process gets lost, it could be laying the groundwork for future challenges.

Organizations continue to utilize a combination of methods—broker and independent consultants, management judgment and experience, and cost benefit premium vs. limits purchased—to select the appropriate level of limits. For companies operating in a tougher legal environment (litigious) or having increasing exposures to large-scale natural catastrophes, risk managers rely more on a comprehensive approach than other regions because single methods alone cannot meet the challenges.

For the second straight time since its introduction as an option, coverage terms and conditions is cited as the top criterion in an organization's choice of insurers, followed closely again by claims service and settlement.

Cyber risk assessment and coverage

In response to this now emergent threat, more companies are either adopting cyber risk assessments (53 percent), transferring greater risk to the commercial insurance market (33 percent), or evaluating alternative risk transfer measures (captive use is projected to rise from 12 percent to 23 percent by 2020).

However, only 23 percent of companies currently employ any financial quantification within the cyber risk assessment process. Without the financial stats, risk managers will find it hard to adequately prioritize capital investment in risk mitigation, or attract sufficient attention from a potentially less tech-proficient board.

About 33 percent of surveyed companies are now purchasing cyber coverage, up from 21 percent in the previous survey. Regionally, this uptake remains inconsistent. North American companies lead the regions in purchasing cyber coverage (68 percent) while those in Latin America remain way behind at nine percent.

Captives

Captives continue to be a popular way for clients to finance risk, with considerable interest in forming a new captive or protected cell company (PCC) in the next five years, especially in North America, Asia Pacific and the Middle East. The healthcare, energy, beverages and conglomerates sectors tend to use captives more. Property damage including business interruption and general liability continue to be the most popular lines underwritten in captives. We have seen a significant amount of interest from companies looking for ways to use their captive to underwrite cyber coverage.

Multinational programs

Exposures to loss, aka "risk", whether directly or indirectly related to international operations, continue to be well represented in the list of top challenges for respondents in Aon's 2017 survey. Of the 20 top risks identified by survey respondents, about 16 can be tied to international exposures, either directly or as a contributing consideration.

About 49 percent of all respondents—the largest group among all respondents—report having control over all insurance purchases including corporate and local placements from corporate headquarters, a four percent increase from that of 2015. Those reporting control from both the headquarters and local operations have decreased from 44 percent in 2015 to 41 percent in 2017.

General liability and property coverage continue to be the lines of business most frequently purchased as a multinational program, including master and local policies. When asked to rank the reasons for purchasing multinational insurance programs based on their importance, respondents put desire for coverage certainty on the top of the list.

Evolution and innovation in risk management

As in prior surveys, we hope to call attention to the interdependency among the top risks as well as those outside of the Top 10 rankings. Social media has created a rapidly expanding network of new connections between individuals and groups, and technologies have accelerated accessibility. But as more people turn to social media for news or to post stories, organizations are becoming more vulnerable to reputational risks. When the dominos start to fall, they fall fast. Damage to reputation restricts a company's ability to attract and retain talent, which in turn results in failure to innovate and meet customer needs. The list goes on. The same can be said about political risk/uncertainties, which deters business investment and could lead to economic slowdown. On the other hand, slow economic growth could spawn more protectionist policies, and lead to trade wars and political tension. This interdependency among risks illustrates that organizations can no longer evaluate risk in isolation but must consider their interconnectedness.

More importantly, the study shows that insurable risks among the featured Top 10 list, such as business interruption, third party liability and property damage, seem to be gradually moving down. Risks that are currently difficult to insure are emerging as major concerns for global organizations. This means that the insurance industry will have to be more innovative and expand their products and programs to address some of the most complex and challenging risks.

We live in an era of unprecedented volatility— uneven and slow economic growth, changing demographics and rising geopolitical tensions, combined with the rapid pace of changes in technology—are converging to create a challenging new reality for our clients. These forces create opportunities that we cannot even imagine, but also present new frontiers to be explored.

Global Risk Management Survey risk ranking

Global Risk Management Survey risk ranking		partially insura	ble uni	nsurable insurable		
Damag reputa	ge to ation/brand	Economic slowdown/ slow recovery	3	Increasing competition	4	Regulatory/ legislative changes
hackin	crime/ og/viruses/ ous codes	Failure to innovate/meet customer needs	7	Failure to attract or retain top talent	8	Business interruption
Politica	al risk/ tainties 10	Third party liability (incl. E&O)	11	Commodity price risk	12	Cash flow/ liquidity risk
13 Proper	rty damage 14	Directors & Officers personal liability	15	Major project failure	16	Exchange rate fluctuation
respor	rate social nsibility/nability	Technology failure/ system failure	19	Distribution or supply chain failure	20	Disruptive technologies/ innovation
21 Capita credit	l availability/ risk 22	Counter party credit risk	23	Growing burden and consequences of governance/ compliance	24	Weather/ natural disasters
	ment or unicate	Merger/acquisition/ restructuring	27	Injury to workers	28	Failure of disaster recovery plan/ business continuity plan

Global Risk Management Survey risk ranking (cont)			partially insu	ırable 🔃 uı	ninsurable 📕 insurable	
	of intellectual perty/data	Workforce shortage	31	Environmental risk	32	Crime/theft/ fraud/employee dishonesty
55 infra	s of technology astructure apport ness needs	Inadequate succession planning	35	Product recall	36	Concentration risk (product, people, geography)
and	ng workforce related th issues	Accelerated rates of change in mark factors and geopolitical risk environment	39	Interest rate fluctuation	40	Globalization/ emerging markets
	thical avior	2 Outsourcing	43	Resource allocation	44	Terrorism/ sabotage
45 Clim	nate change	Asset value volatility	47	Natural resource scarcity/ availability of raw materials	48	Absenteeism
49 Soci	al media 5	Sovereign debt	51	Pandemic risk/ health crisis	52	Share price volatility
53 Pens fund	ion scheme ling	Harassment/ discrimination	55	Kidnap and ransom/extortion		

Respondent Profile

Respondent Profile

Aon's 2017 Global Risk Management Survey, a web-based biennial research report, was conducted in Q4, 2016 in 11 languages. The research represents responses of 1,843 risk decision-makers from 33 industry sectors, encompassing small, medium and large companies in more than 60 countries across the world.

About 64 percent of the participants represent privately-owned companies and 23 percent public organizations.

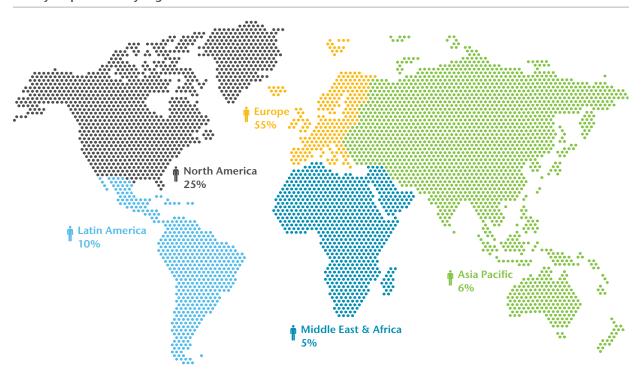
The rest are primarily government or not-for-profit entities.

The robust representation of the 2017 survey has enabled Aon to provide insight into risk management practices by geography and industry, and has validated the data that illustrate risks common to all industries.

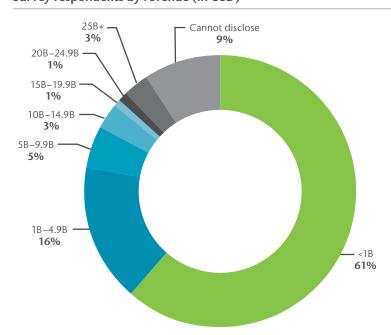
Survey respondents by industry

Industry	Percent	Industry	Percent
Agribusiness	3%	Machinery and Equipment Manufacturers	3%
Aviation	1%	Metal Milling and Manufacturing	3%
Banks	3%	Non-Aviation Transportation Manufacturing	2%
Beverages	1%	Non-Aviation Transportation Services	4%
Chemicals	4%	Nonprofits	2%
Conglomerate	2%	Power/Utilities	6%
Construction	8%	Printing and Publishing	1%
Consumer Goods Manufacturing	4%	Professional and Personal Services	5%
Education	2%	Real Estate	3%
Energy (Oil, Gas, Mining, Natural Resources)	4%	Restaurants	1%
Food Processing and Distribution	3%	Retail Trade	4%
Government	3%	Rubber, Plastics, Stone, and Cement	1%
Health Care	5%	Technology	4%
Hotels and Hospitality	1%	Telecommunications and Broadcasting	2%
Insurance, Investment and Finance	7%	Textiles	1%
Life Sciences	1%	Wholesale Trade	4%
Lumber, Furniture, Paper and Packaging	2%		

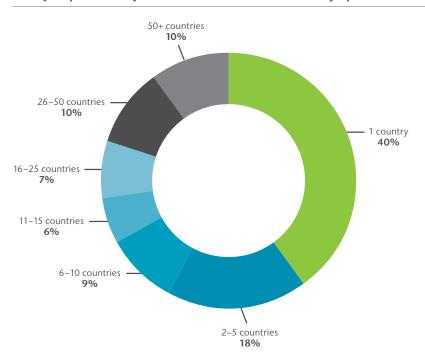
Survey respondents by region



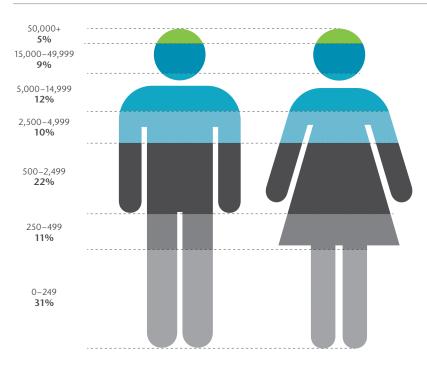
Survey respondents by revenue (in USD)



Survey respondents by number of countries in which they operate



Survey respondents by number of employees



Survey respondents by role

Role	Percent
Chief Administration Officer	6%
Chief Counsel/Head of Legal	3%
Chief Executive	3%
Chief Financial Officer	12%
Chief Operations Officer	1%
Chief Risk Officer	7%
Company Secretary	1%
Finance Manager	7%
General Business Manager	2%
Head of Human Resources	2%
Managing Director/Partner	3%
Member of the Board of Directors	1%
President	1%
Risk Consultant	2%
Risk Manager or Insurance Manager	29%
Treasurer	3%
Other	18%

Top 10 Risks





2017	1
2015	1
2013	4
2011	4
2009	6
2007	1

Number 1 risk for the following industries:

Banks

Beverages

Consumer Goods Manufacturing

Food Processing and Distribution

Hotels and Hospitality

Insurance, Investment and Finance

Non-Aviation Transportation Manufacturing

Non-Aviation Transportation Services

Non profits

Professional and Personal Services

Retail Trade

Telecommunications and Broadcasting

Damage to Reputation/Brand

A tech worker in China purchased a newly released electronic device in October 2016, but while he was charging it, the device caught fire. Shocked and frustrated, he videotaped the incident and uploaded it to a chat group. Within a few hours, the clip was watched and reposted millions of times by users around the world. Soon, customers in other countries began reporting similar incidents with this product.

Even though the defective devices accounted for less than 0.1 percent of the entire volume sold, this video caused widespread panic among consumers and distributors, undermining their confidence in the product. A month later, the company producing the electronic device issued a global recall and stopped its production. The corrective measure cost them an estimated USD 5 billion and sent the company share price plummeting. Ironically, the manufacturer, known for its cutting edge technology to make it easier for the public to share information, became a victim of the tech revolution.

This headline-grabbing incident, which took place right before Aon conducted our biennial global risk management survey, helps illustrate and explain why damage to reputation/brand has once again ranked as the number one risk in Aon's 2017 Global Risk Management Survey. In an age when a crisis could spread globally within hours or minutes thanks to instant social media, the risk of reputational damage has exploded exponentially.

In 2016, while defective products, customer service issues, workplace accidents, corporate malfeasance, fraudulent business practices or corruption continued to be key reputation wreckers, new media technologies greatly amplified their negative impact. In addition, damage to reputation also occurred because of an inappropriate tweet by an executive and a posting by an employee who complained about sexual harassment or discrimination.

At the same time, the U.S. election in November 2016 has spawned a new trend—many companies with politically outspoken owners or CEOs are being increasingly caught in political crossfire that could threaten their corporate brands. In addition, fake news, which started by political parties as a way to influence elections, has begun to spill over into the corporate world. Since social media platforms have no fact checkers, fake news is gradually becoming rampant. An online story in October 2016 about a fabricated quote by the CEO of a prestigious international beverage company, for example, triggered a boycott by some consumers.

"The beverage industry has ranked damage to brand and reputation as its number one risk. The industry has come under frequent attacks by consumers and health organizations. Sugar seemingly has become public enemy number one, not just in the U.S. but around the world. This has led to soda taxes, advertising restrictions, and other governmental regulations targeting the industry—which is part of the regulatory changes that beverage companies must now address."

Tami Griffin, National Practice Leader, Food System, Agribusiness & Beverage, U.S. Even though brand equity, mostly comprised of customer loyalty, prestige and positive brand recognition, is considered part of a company's intangible assets, it directly impacts a company's bottom line. Past studies by Aon suggest that there is an 80 percent chance of a public company losing at least 20 percent of its equity value in any single month over a five-year period because of a reputation crisis.

In this year's survey, the financial services industry, which is still facing negative perception due to the 2008 global financial crisis and some on-going government investigations, considers reputational risk as a top threat. Meanwhile, a series of product recalls and a much publicized controversy involving an emission control software issue heighten the concerns of this risk in the nonaviation transportation manufacturing sector. For those in consumer goods manufacturing, beverages, food processing and distribution, automobiles, hotels and hospitality, where a negative online review or complaint could have a direct impact on profitability or survival, it comes as no surprise that damage to reputation/brand is rated as a top threat.

Rankings in the regions	
Asia Pacific	1
Latin America	1
North America	2
Europe	2
Middle East & Africa	5

Regionally, surveyed organizations in Asia Pacific and Latin America have ranked this risk as a number one threat partially because of a series of high-profile product recalls and widely publicized corporate corruption and bribery scandals across the two regions in 2016.

Given that reputational events often arrive with little or no warning, organizations are forced to respond quickly and effectively in real-time. So, it is important for companies to have a comprehensive reputation risk control strategy in place to preserve consumer trust. Meticulous preparation and executive training could prevent a critical event from turning into an uncontrollable crisis, and help maximize the probability of recovery.

"It's about being out there, being on the front foot, and having a clear plan about what the eventualities might be. It's all about communicating."

Tim Ward, CEO Quoted Companies Alliance



2017	2
2015	2
2013	1
2011	1
2009	1
2007	8

Number 1 risk for the following industries:

Chemicals

Construction

Hotels & Hospitality

Lumber, Furniture, Paper and Packaging

Machinery and Equipment Manufacturers

Metal Milling and Manufacturing

Real Estate

Restaurants

Textiles

Economic Slowdown/ Slow Recovery

In mid-December 2016, the Federal Reserve in the U.S. raised its benchmark interest rate by 0.25 percent, the second since the financial crisis of 2008. The move signified the Fed's confidence in the American economy, even though it only grew at 1.6 percent in 2016, way below the recovery's tepid 2.2 percent average.

Meanwhile, the World Bank indicates that the Eurozone economy ended 2016 on a bright note at 1.7 percent growth rate, and it is expected to continue at a steady pace. The debilitating budget deficit will continue to edge down and the fiscal stance remain non-restrictive. In Asia and the Pacific region, China continued its gradual transition to slower but more sustainable growth, from 6.7 percent in 2016 to 6.5 percent in 2017. For the rest of that region, growth remained stable at about 4.8 percent.

These moderate growth stats offer organizations some reasons for cautious optimism. Economic slowdown/slow recovery, which was consistently ranked as the number one risk facing companies worldwide since 2009, has understandably dropped for the second time to number two. Only three in 10 respondents say they have a plan for, or have undertaken a formal review of, this risk and the percentage of organizations suffering a loss of income in the last 12 months has dropped slightly from 46 in 2015 to 45 in the current survey.

The perception of economic slowdown/slow recovery varies by industry. The construction, lumber, furniture, paper and packaging, machinery and equipment manufacturing sectors, all of which are sensitive to capital spending, see economic slowdown/recovery as a number one risk. It is hardly surprising. A Reuters 2016 economic analysis report points out that governments and companies cutting or flat-lining their capital expenditures in 2016 outpaced those that increased spending by a factor of more than two to one. With the overall slow economic growth and uncertainties worldwide, companies are holding back on capital expenditures.

Also in 2016, while the broader slump in the commodities market, the continued volatility in the currency markets (especially after Britain's Brexit vote) and sluggish demands in the emerging markets directly affected industries listed in the above chart. Among them, the chemicals, metal milling and manufacturing, and machinery and equipment manufacturing, and textile sectors were hit the hardest.

The uncertainties in the economy dented consumer confidence, which in turn negatively impacted restaurant/fast food businesses. In June 2016, Stifel analysts even released a report, claiming that the slowing restaurant businesses were telltale signs of a sector-wide recession. Reports like this no doubt cast shadows over our perception of this risk.

"A strong and growing economy is critical for the real estate industry, especially continued growth in job creation. A growing job market will spur increased demand for office, retail, industrial, multifamily and hospitality space. Until recently the global economy has had sluggish growth in many regions, so it is no surprise that this risk tops the list for the sector worldwide."

Kevin Madden, Real Estate Practice Leader, U.S.

Rankings in the regions	
Asia Pacific	5
Europe	1
Latin America	3
Middle East & Africa	1
North America	5

Similar to 2015, the geographical breakdown shows that economic slowdown/slow recovery remains the number one risk for survey participants in Europe. There, amid fierce contentions over trade agreements, concerns about the impending negotiations for Britain's exit from the EU, and political instability across the region, companies still feel that they are in an economic downturn. The same holds true for organizations in the Middle East & Africa, where the economy accelerated slightly at 2.8 percent in 2016, but such growth only occurred in a limited number of countries. The rest of the region is still being wrecked with armed conflicts, terrorism and political chaos, all of which stunted economic activities.

Looking forward, even though many businesses consider the global recovery as being too slow, the World Bank and the U.S. Federal Reserve seem to see the outlook as healthy. In the U.S., the Fed predicts that the country's GDP will grow between the ranges of two percent to three percent. Meanwhile, the current administration's agenda to cut corporate and individual taxes, build more roads and bridges, and cut away regulations could boost growth if it is implemented.

For Europe, the World Bank believes that the labor market gains and increases in private consumption could enable companies to overcome the hindrances to growth. In its 2017 economic forecast, growth in the euro area is expected to be 1.5 percent in 2017 and 1.7 percent in 2018. In Asia Pacific, experts say the economy will remain resilient over the next three years.

Concerns over the world's economy may not go away soon, so organizations should learn from lessons in the past and embrace it for the long-term from a global perspective. We are no longer sitting on an island by ourselves. What happens on the other side of the world can have a direct impact on every organization, whether you have international operations or not.



2017	3
2015	4
2013	3
2011	3
2009	4
2007	4

Number 1 risk for the following industries:

Non-Aviation Transportation Manufacturing

Non-Aviation Transportation Services

Retail Trade

Wholesale Trade

Increasing Competition

While analyzing this risk in the last survey report, we cited the example of Xiaomi, an Asian smartphone startup that was emerging as a game changer in the smartphone industry. In 2015, the company, then valued at USD 45 billion, shocked the tech world by selling more than 60 million phones in China alone, while planning to dip into the European and U.S. retail space.

However, in a matter of two years, the company found itself struggling with declining sales due to tough competition from other domestic and international giants such as Huawei, Apple, and Samsung. In 2016, its smartphone shipments were said to be so disappointing the company chose not to release figures about them, and several of its senior executives departed. Inevitably, its plan for worldwide relevance has also been sidelined.

At any given time, if we search "increasing competition" on Google, we'll see hundreds of news items coming up and the majority are related to similar stories we have quoted—companies missing earnings and sales targets or talent shortages due to "increasing competition."

This risk affects organizations of all types and sizes, from prestigious telecommunications and healthcare companies to small retail stores and educational institutions. The situation validates the result in Aon's survey, where respondents consider increasing competition in the top three risks overall, jumping a notch from 2015. In fact, during the previous survey, many respondents projected that this threat would top the risk chart.

The survey results remind organizations of the volatile business environment in which we operate. According to The Global
Competitiveness Report 2016–2017 published by WEF, or the World Economic Forum, a new wave of technological convergence and

digitalization has increased the pressure for businesses to create new products and services, and find new ways to produce things. In an open trade economy, while companies can benefit from free flow of labor and technology transfer that comes from imports and foreign investment, they also face more exposure to fierce international competition and new ideas. More newcomers are now competing against established market leaders that have formidable brands, customer loyalty and deep resources.

As a result, the percentage of companies falling out of the top three rankings in their industry increased almost seven fold over the past five decades, says a research article at the Harvard Business Review. Market leadership is becoming an "increasingly dubious prize." All this uncertainty poses a tremendous challenge for traditional business strategies that worked well in a relatively stable and predictable world. In many cases, the competition has become so fierce that it is virtually impossible for executives to clearly identify in what industry and with which companies they're competing.

Surveyed non-aviation transportation manufacturers, mostly automakers, have ranked increasing competition as a number one risk because the battles for market share among the world's largest automakers have become much tougher as the gaps in technology, quality and style among them continues to narrow, and newcomers from China and India are also jumping into the fray.

Meanwhile, companies in this sector are also facing intense competition as they attempt to shrink the time and cost of moving goods between the manufacturer and the customer's point of purchase. Smaller regional carriers are now competing with those integrated transportation companies that have significantly greater financial, technical and

"For the higher education sector, this is an underrated risk at rank 5. Increasing competition for a diminishing number of traditional students and the growing inability to recruit from certain countries are having revenue impacts that threaten the survivability of some institutions and should be at the top of their agenda."

Leta Finch, National Practice Leader, Higher Education, U.S. marketing resources, while the rising cost of diesel has intensified competition between trucking and rail industries. According to a Wall Street Journal article in June 2016, more large trucking companies in the U.S. were failing in the first two quarters of the year due to competition and low demands than in the previous year.

Increasing competition is understandably seen as a number one threat by participants in the retail and wholesale trade sectors, which are evolving as digital media is becoming effective at serving people's basic shopping and distribution needs and the public's dependence on traditional physical stores to serve as distribution points for products is rapidly diminishing.

In Europe and Asia Pacific, increasing competition is perceived as a number three risk, down from number two in previous surveys. Companies in Europe continue to operate in a highly competitive environment because the region has seen slower growth for years and the EU has stringent laws against anticompetitive practices and mergers. While organizations compete fiercely with their rivals within the EU, they also compete with big multinationals in North America and newcomers from Asia.

In Asia Pacific, excessive labor capacities, easy entries and risk maturity of multinationals have increased competition. More importantly, China's rise has posed challenges for companies in the region's established economies, such as Australia, Japan, Korea, Singapore and Taiwan. If that is not enough, many of those aggressive new competitors are government-backed enterprises with access to lower-cost capital.

Rankings in the regions		
Asia Pacific	3	
Europe	3	
Latin America	12	
Middle East & Africa	7	
North America	7	

On a macro level, leaders at WEF believe that breakthroughs in technologies such as artificial intelligence, biotechnology, robotics, the internet of things, and 3D printing will drive healthy competition for businesses. However, as the world's major economies are struggling with the double challenges of slowing productivity growth and rising income inequality, policy-makers are resorting to more inward-looking and protectionist policies. "Declining openness in the global economy is harming competitiveness and making it harder for leaders to drive sustainable, inclusive growth," said Klaus Schwab, WEF's founder and

executive chairman.

For individual companies hoping to build an enduring competitive advantage, experts who have authored the previously mentioned Harvard Business Review article urge them to improve adaptability by reviewing their business strategies periodically, and setting direction and organizational structure on the basis of an analysis of their industry and some forecast of how it will evolve. Those that thrive are quick to read and act on signals of change, says the article. They have learned how to experiment frequently, not only with products and services, but also with business models, processes, and strategies.



2017	4
2015	3
2013	2
2011	2
2009	2
2007	2

Number 1 risk for the following industries:

Health Care
Life Sciences
Power/Utilities

Regulatory/Legislative Changes

Speaking of regulations, experts in the U.S. always bring up the Dodd-Frank Act of 2010 to illustrate the costly burdens that regulators have imposed upon businesses. The Dodd-Frank law came out in the aftermath of the global financial crisis with a noble intent—stopping banks from taking excessive risks to prevent another financial disaster. But at nearly 281 pages, the law, laden with complex reporting and disclosure requirements that involve five federal agencies to implement, has become a key financial risk for businesses.

In 2016, Bloomberg quoted American Action Forum as saying that the cost of implementing the legislation, the most expensive in the law's history, soared to USD 36 billion and 76 million paperwork hours over a period of six years. From 2000 to 2007, Forbes says the developed economies' top performing banks had achieved an average return on equity of 26 percent. Today, the returns for many of these same banks are in single digits; as a result, most are forced to reduce their size / footprint. A study by Harvard Kennedy School of Government concludes that the Dodd-Frank Act accelerated the decline of America's community banks.

Businesses in other industries and other parts of the world face similar hurdles in the post-recession world. For example, in July 2016, the EU adopted legislation that imposes cyber security and reporting obligations on industries such as banking, energy, transport and health, and on digital operators like search engines and online marketplaces. Similar laws are being implemented in other countries, such as Australia and the U.S. (i.e. the state of New York). Businesses in the U.K. alone could face up to 122 billion pounds in regulatory penalties for breaches when the new EU cyber legislation comes into effect in 2018.xiv

That explains why participants in Aon's Global Risk Management surveys have consistently ranked regulatory and legislative changes as a top risk during the past decade. In fact, in Europe, Asia/Pacific and North America, regulations have generated so much backlash that many probusiness politicians have made it a centerpiece in their political platforms. Britain's effort to leave the EU was partially driven by what many perceive as controls of "the meddling governments and dictates from Brussels." In the U.S., President Trump also repeatedly promised businesses to roll back regulations.

Over the past two years, the leaders in countries such as Canada, Australia and the U.K. have implemented policies to ease regulations for businesses. In the U.K., for every new rule issued, the government stipulates that three existing rules must be eliminated. The Hill, a U.S. political website quoted the U.K. government as saying that such new requirements saved businesses 885 million pounds from May 5, 2015 to May 26, 2016.

These positive and yet gradual changes in the global regulatory landscape are reflected in Aon's 2017 survey, where respondents rank the risk at number four, down from number three in 2015 and number two in previous years. At the same time, the reported readiness by companies for regulatory/legislative changes is cited by 44 percent of respondents, down from 53 percent in 2015.

"Regulatory/Legislative change has and will continue to be the top risk for the health care industry, especially with the recent election and changes in the legislative and executive branches of government and a new appointment to the Supreme Court. A potential repeal of the ACA and new legislation may create great uncertainty in the regulatory and reimbursement environment."

Dominic Colaizzo, Chairman National Healthcare Practice, U.S. As we see in previous surveys, healthcare, pharmaceuticals and biotechnology companies, which have been under closer and broader scrutiny from drug discovery and lab tests to pricing and post-marketing surveillance, view regulatory/legislative changes as a number one risk. The power/utility sectors express similar concerns as global air and water quality standards are tightening. Interestingly, the banking industry is not on this chart—the recent high profile government investigations against large banks have made mitigating reputational risk a priority. It is also possible that banks are gradually adjusting to a spate of robust regulatory and legislative changes since 2008. In addition, the elections of Donald Trump and other pro-business leaders around the globe, who campaigned vigorously on anti-regulation promises, have offered financial institutions some encouragement.

In Asia where experts say the legal and regulatory environments have become noticeably volatile due to political changes, respondents rank it consistently as the number two risk. In China, regulators have ramped up their regulatory enforcement over the past three years, and both local companies and multinationals are under increasing scrutiny for alleged monopoly, safety, corruption and bribery charges. The tension there probably contributed to this perception.

Rankings in the regions	
Asia Pacific	2
Europe	4
Latin America	5
Middle East & Africa	6
North America	4

For companies in North America and Europe, changes are underway. A few days after President Trump took office, he followed the actions of leaders in the U.K. and Canada, and signed an executive order that directed federal agencies to identify at least two existing regulations for repeal for every new regulation that the government wishes to enact. That order also asks that the costs of all new regulations put forth in 2017 be offset by the elimination of existing regulations. In another order, he called for the establishment of regulatory reform task forces to research existing regulations and identify those deemed to be burdensome on the U.S. economy for possible repeal or rewrites.

Regardless of how the regulatory landscape will evolve, companies have increasingly recognized that regulation is no longer a secondary concern, but is now a primary consideration in their business strategies. Rather than seeing it as a burden, they look at this risk as an opportunity to create a competitive advantage over their peers who do not manage this process effectively.



2017	5
2015	9
2013	18
2011	18
2009	25
2007	19

Number 1 risk for the following industries:

Aviation

Education

Government

Cyber Crime/Hacking/ Viruses/Malicious Codes

In March 2016, hackers posed as an internet account-services provider and sent out a group email to the U.S. National Democratic Committee, claiming that passwords had been compromised and urging staff to click on a false link and make the password changes there.

While most recipients discarded this phishing email, an aide to Hillary Clinton's campaign accidentally took the bait due to a miscommunication with the IT department. The blunder gave hackers access to this aide's 60,000 emails, which, upon their release by Wikileaks, caused unexpected upheavals in the run-up to the U.S. election. Partisan politics aside, many shudder at the massive damages by such pervasive cyber assaults.

This event was correctly predicted by Stroz Friedberg, an Aon company which is a global leader in the field of cyber security. In its 2016 Cyber Security Predictions, Stroz Friedberg not only projected that hackers would wage an information war and influence the U.S. election, but also warned of the perils of unsecured internet of things devices, such as the one in October 2016, when a series of attacks on a U.S. based domain-name service provider disrupted access to a host of the world's best-known e-commerce, media and social media websites.xvi

These incidents have no doubt changed the perceptions of Aon's survey participants, making them more aware of the deadly consequences of this rising risk. In the current survey, cyber crime/hacking/viruses/malicious codes jumped to number five. The risk entered the Top 10 list for the first time (at number nine) in 2015.

Their concerns are justified. The Ponemon Institute, a data security research organization, has recently released its latest cyber security study of 237 organizations in six countries. According to the study, the annual average cost of a cyber incident in 2016 rose to \$9.5 million, a 21 percent net increase over the past year. Virtually all surveyed organizations in the Ponemon study have suffered malware attacks, which are linked with malicious code attacks over the four-week benchmark period. Ransomware is a newer example of malware and is believed to be a growing problem. Phishing and social engineering attacks increased significantly from 62 percent in 2015 to 70 percent in 2016.

Meanwhile, according to a recent Aon Benfield report, there has been a significant uptick in demand for cyber insurance, particularly in the wake of high-profile cases. With approximately USD 1.7 billion in premiums, annual growth for cyber insurance coverage and product is running at 30 to 50 percent.xviii

In July 2016, officials at the European Aviation Safety Agency revealed that the world's aviation systems are subject to an average of 1,000 attacks each month. Malware or security breaches involving aircrafts in the U.S., Turkey, Spain, Sweden and Poland have provoked delays, and loss of information. The fear is that one day terrorists may crash planes through cyber attacks. This announcement underscores the severity of the risk facing the aviation industry, which ranks it as number one in Aon's current survey.xix

"Cyber risk was ranked sixth by retail participants, which was surprisingly low for this sector. In the previous survey in 2015 cyber risk was ranked in third place. Cyber fatigue seems to be setting in with retailers, however, a breach could be damaging to their brand and reputation. Quick post-breach response is now a focus for brand protection."

MaryAnne Burke, National Practice Leader, Retail, U.S.

Rankings in the regions	
Asia Pacific	7
Europe	6
Latin America	18
Middle East & Africa	8
North America	1

The same is true for government entities, which increasingly have become targets. In the U.S., a report by the Government Accountability Office surveyed 24 federal agencies and found that between 2006 and 2015, the number of cyber attacks had climbed 1,300 percent—from 5,500 to more than 77,000 a year.**

When it comes to data breaches, educational institutions have not received much media attention. However, the rising number of incidents has raised the concerns of surveyed institutions. According to an education website, University Business, since 2005, higher education institutions in the U.S. have been the victim of 539 breaches involving nearly 13 million student records. XXI In the UK, recent research found that every hour, one-third of universities there are hit by a cyber attack. XXII In May 2016, Japanese student hackers took down 444 school networks simultaneously.

Participants in North America see cyber crime/ hacking/viruses/malicious codes as a number one threat. The result is consistent with a recent survey by Pew Research Center, which found that Americans identify cyber attacks as the second greatest global threat to the U.S., behind ISIS.xxiii It is also becoming a growing threat for European companies. In the U.K., Beaming, an internet service provider that polled 540 companies regarding cyber security, said cyber-attacks may have cost businesses as much as 30 billion pounds in 2016.xxiiv

In its <u>latest report</u>, Stroz Friedberg outlined six predictions for 2017 to help security professionals and business leaders:

- 1. Criminals harness IoT devices as botnets to attack infrastructure.
- Nation state cyber espionage and information war influences global and political policy.
- 3. Data integrity attacks rise.
- 4. Spear-phishing and social engineering tactics become craftier, more targeted and more advanced.
- Regulatory pressures make red teaming the global gold standard with cyber security talent development recognized as a key challenge.
- Industry first-movers embrace pre-M&A cyber security due diligence.xxv

As cyber crimes become more rampant, more costly, and take longer to resolve, companies need to improve their risk readiness. This, according to Stroz Friedberg, will require companies to recruit and build best-in-class red teaming capabilities, and accept that cyber security risk management is a critical part of doing business across industries.

Insurance specifically designed to cover the unique exposure of data privacy and security can act as a backstop to protect a business from the financial harm resulting from a breach. While some categories of losses might be covered under standard policies, many gaps often exist. Risk managers should work with their insurance brokers to analyze such policies and determine any potential gaps in existing coverage because cyber events can impact numerous lines of insurance coverage.



2017	6
2015	6
2013	6
2011	6
2009	15
2007	14

Number 1 risk for the following industries:

Life Sciences

Printing and Publishing
Rubber Plastics Stone

Rubber, Plastics, Stone and Cement

Technology

Failure to Innovate/ Meet Customer Needs

In May 2016, Aol Finance posted 30 nostalgic photos that depict some of America's most iconic companies and brands that have vanished over the past three decades—Woolworths, Polaroid, Alta Vista, Kodak, Blockbuster, Borders, Compaq, MCI and General Foods. The list goes on. There is an underlying factor in the featured companies—they believed that their product or service had an unlimited shelf life, but when they lost their competitive edge, they closed. These pictures convey a stark message—innovate or fail.**xivi

Despite the urgency and massive investments of time and money, innovation still remains a frustrating pursuit in companies worldwide. In Aon's current and previous surveys, respondents have consistently listed failure to innovate/meet customer needs as a Top 10 risk. Three years from now, the risk is expected to climb to number four in the rankings.

Innovation poses a special challenge for the life sciences industry, which still feels the ill effects of shrinking R&D resources from the 2008 recession, a wave of patent expirations on best-selling medications, and competition from lower-priced generic medicines. Therefore, innovating R&D to speed discovery of new medicines is a must for survival.

The printing and publishing sector has been facing unprecedented pressure in today's market place as the mega-trends of readership and ad dollars are migrating to digital, the cost of printing is rising, and ad rates are shrinking. While companies are relying on radical cost containment in their attempt to balance their books, many are searching for radical innovation in editorial products and business models to reinvent themselves.

For the rubber, plastics, stone and cement industries, the need for innovation in materials, production process, performance and technology has never been more urgent in meeting increasingly diversified customers' demands, tougher environmental standards, shorter lead times, and lower prices.

As in previous surveys, failure to innovate/ meet customer needs poses the number one threat for participants in technology, where the lifetime of products continues to shrink, the race to market has intensified, and consumer needs are fickle. FindtheCompany, a corporate research site, recently ran a list of "30 companies that could disappear in 2017"

Technology and computer companies make the most appearances on the list, with nine total corporations at risk. "xvvii But, meanwhile, technology companies are also leading the world in innovation. In its most recent survey of the most innovative companies by Boston Consulting Group, technological companies such as Apple, Google, Microsoft and Facebook have taken up half of the top 10 spots. "xvviii These results speak to the volatility of tech firms, which can grow at record rates, then fall at the hands of a disruptive competitor.

"Failure to innovate, disruptive technology, coupled with attracting and retaining top talent, increasing competition and brand risk will maintain their Top 5 status for the Technology sector for the foreseeable future. These factors will also increase for other industries that are going through digitization and digital disruption."

Eric Boyum, National Practice Leader, Technology, U.S. While companies in emerging growth markets such as the Middle East & Africa and Asia have benefited from existing technologies and management experience in advanced countries, they now see innovation as being critical in sustaining their competitive advantage. For example, Dubai—where new startup concepts used to be dominated by replicas of successful business models in more advanced markets—is now becoming a launch pad for innovative businesses across multiple geographies, experts say.

In the 2016 Global Innovation Index, China has joined the ranks of the world's top 25 most innovative economies for the first time. Meanwhile, Singapore, South Korea, Japan, New Zealand and Australia have all made progress in the rankings. Asia is also the top destination for corporate R&D, accounting for 35 per cent of total in-region R&D, including domestic and imported R&D.xxix

In theory, successful innovations lead to competitive advantage, allowing for unique brand positioning and differentiation, establishing brand reputation equity, and most importantly, boosting profitability. But frequently, innovation initiatives fail abysmally, and successful innovators often have difficulty sustaining their performance.

In his book, *Unrelenting Innovation*, University of Southern California Professor Gerard Tellis says during an <u>interview with Time Magazine</u> that companies are in greatest danger of failing when they are at the peak of their success because they tend to protect current products. Change is constant and protecting your current product is a formula for disaster.

Rankings in the regions	
Asia Pacific	4
Europe	5
Latin America	22
Middle East & Africa	3
North America	6

Tellis believes that unrelenting innovation requires companies to willingly embrace risks. When an innovation fails, one should learn from failures in order to hit on the successful innovation that creates the next big mass market. Amazon CEO Jeff Bezos emphasizes similar ideas in a recent talk. "At Amazon, we have to grow the size of our failures as the size of our company grows," he said. "We have to make bigger and bigger failures—otherwise none of our failures will be needle movers."xxxxi

Professor Tellis says the innovator often comes from within an organization—employees have the best ideas for innovations from their deep experience and knowledge of customer response. Firms can unleash the power of innovation by recognizing and empowering the talent within. Through idea fairs, funding contests, prototype races, and competing commercializations, an organization can foster bottom up innovation from the crowd instead of top down innovation from a fallible few.xxxii



2017	7
2015	5
2013	5
2011	7
2009	10
2007	7

Failure to Attract or Retain Top Talent

The dramatic changes in the global economic and political landscapes in the months leading up to Aon's survey has made it necessary to focus on how the macro-environment impacts the way organizations perceive the risk of failure to attract and retain talent.

1. Economic factors. In 2016, as the global economy slowly recovers from the recession that started in 2008, the unemployment rate in major economies has fallen dramatically, with the U.S. dipping to 4.6 percent, U.K., 4.8 percent, Germany, 4.2 percent, and Australia, 5.6 percent. Improved economic performance has resulted in a demand for talent that outstrips supply.

Meanwhile, in India and China, rapid development in the past decade has created a ravenous appetite for jobs, and expanded demand for skills. Even though the two countries seem to have abundant untapped human capital, a severe brain drain—a large fleet of well-educated and well-trained scientists and tech workers ending up in industrialized nations—is actually causing a talent deficit.

- 2. Demographic factors: Population aging in industrialized countries such as Japan, where 26.3 percent of its population is now 65 years of age or older, has taken skilled employees out of the workforce at a faster rate than they can be replaced. At the same time, countries like Spain and Greece are experiencing severe immigration-driven "brain drain" due to their dire economic conditions and mismatched skills among young people.
- **3. Political factors:** The governments in the U.S. and Europe have always pursued highly skilled immigrants as a temporary fix to ease talent and skill shortages in the native labor force. However, pending immigration reforms will reverse the gains, exacerbating their abilities to fill certain positions in fields such as technology, healthcare, and finance.

4. Workplace Factors: According to Aon Hewitt's People Trends 2017, the workplace is changing with the addition of millennials who have different expectations about work, the rise of contingent workers, and shifting work boundaries. Nearly one in five technology firms report 25 percent of workers are contingent. Meanwhile the expanding middle class in emerging markets requires organizations to rethink their value propositions and recruitment strategies. xxxiii

These factors have no doubt deepened concerns for corporations, adding more complexities to addressing the risk of "failure to attract and retain top talents." In Aon's 2017 survey, respondents have ranked this risk at number seven.

In Aon's survey, respondents from the technology sector consider failure to attract and retain top talent as a number three risk. Experts contribute the severity of this risk to the fact that technologies are under tremendous pressure to deliver complex, specific solutions at faster speeds, creating a demand for employees with highly flexible and specific skill sets. In the U.S., government statistics show that 500,000 computing jobs are currently left unfulfilled, but there are only 50,000 computer science graduates a year.****

From a regional perspective, North American participants have rated this risk at number three. Low unemployment paired with shorter skills cycles due to the speed of technological change have contributed to the difficulties in filling positions. The shortages are particularly acute in industries like manufacturing, construction, transportation and education.

"Failure to attract and retain talent did not appear in the Top 10 for the energy sector in this year's survey. From my point of view, this makes it an underrated risk for the sector, because of greater focus on other areas in the depressed commodity environment. Historically, talent retention coupled with innovation has been a key driver for the energy sector and it will continue to be a key risk in the longer term."

Bruce Jefferis, CEO Energy & Mining. U.S.

In the Middle East & Africa, which is on the cusp of a significant economic transformation, companies rank this risk at number four because the region has been known for its severe talent shortages. Without proper access to education, its young people lack the training and development necessary to contribute productively to the regional and global economy. Moreover, the unstable political environment has robbed the region of many skilled workers who have migrated to industrialized nations in Europe and North America.

Failure to attract and retain top talent threatens to undermine future economic productivity and jeopardizes a company's competitiveness and profitability. While many external factors are beyond the control of businesses, experts say companies should take proper measures to boost their efforts to mitigate this risk.

One of these measures should be creating an ethical and employee-friendly work culture that helps attract and retain talent. According to Corporate Responsibility Magazine, 86 percent of surveyed females and 67 percent of males indicated that they would not join a company with a bad reputation. Alternatively, many would be tempted by significantly lower pay if a company possessed a stellar reputation and corporate culture.

When it comes to filling in talent gaps, experts at Aon Hewitt recommend that HR proactively utilize analytical tools to measure human capital like financial capital, both in terms of rigor and leverage. Meanwhile, companies should initiate special skill training and development programs for both new hires and managers to meet future needs. The training could include coding, programming, data analytics, communications and negotiations.

Rankings in the regions	
Asia Pacific	8
Europe	13
Latin America	16
Middle East & Africa	4
North America	3

For retention, senior management and HR should rethink their value propositions. A recent Aon Hewitt report says that 43 percent of millennials plan to actively look for a new job in 2015 because they feel that their employers' current values focus on more organizational-oriented themes, such as teamwork, profit and customer satisfaction, rather than more relationship-oriented values, including work/home balance, employee recognition, loyalty and respect.

Another related, but often overlooked program, is recognition. Aon Hewitt's People Trends 2017 indicates that having an effective recognition program can create up to a 40 percent difference in engagement. Some companies are now focusing on finding unique reward options for employees who are seeking to trade off free time for salary while others are designing around telecommuting. Organizations that provide for work-life balance will likely have more appeal as workplace preferences continue to change. In short, organizations that effectively incorporate talent strategies in their overall business planning can definitely gain an edge in the war for talent.

In short, organizations that fail to strategically and aggressively address the challenges in attracting and retaining talent could lose the competitive edge needed to thrive. At the same time, those who effectively incorporate talent strategies in their overall business planning can certainly gain an edge in the war for talent.



2017	8
2015	7
2013	7
2011	5
2009	3
2007	2

Business Interruption

In its most recent report, Aon Benfield's Impact Forecasting team has recorded 315 natural catastrophe events in 2016 that generated economic losses of USD 210 billion. Overall, just 26 percent (USD 54.6 billion) were covered by insurance. The top three perils—earthquakes (Japan), flooding (i.e. China and the state of Louisiana), and severe weather (i.e. Hurricane Matthew and winter storms in the U.S.)—combined for 70 percent of all losses.xxxviii In a separate report by Swiss Re, economic losses resulting from man-made disasters in 2016 were estimated to be USD 7 billion.xxxix

During these calamities, business interruption typically accounts for a much higher proportion of the overall loss than it did 10 years ago. According to a <u>study</u> by Allianz Global Corporate & Specialty, the average large business interruptions insurance claim has now exceeded USD 2.4 million, 36 percent higher than the corresponding average property damage claim.^{xi}

These staggering facts underscore the serious threat of business interruption, a common and traditionally key risk for organizations around the world. Business interruption has been on the Top 10 list since Aon's survey started in 2007, when respondents ranked it at number two. Over the years, it has slipped slightly in rankings because organizations feel that they have a better handle on this risk due to their rising awareness, management's more diligent efforts in risk preparedness and prevention, better catastrophe modeling /scenario analyses, and the availability of more robust risk transfer options.

However, as supply chains have become global, there is increasing interdependency among companies. Such an industrial environment is heavily affected by uncertainties that have the potential to turn into unexpected disruptions. Moreover, the focus on inventory reduction and lean supply chains has also amplified such potential. For example, China's city of Tianjin, the world's third largest port, is home to offices of more than half of the Fortune 500 companies, and to factories that build cars, airplane parts, and mobile phones. As one can imagine, the deadly explosions in 2015 caused supply chain disruptions for companies around the globe.xii

More importantly, the proliferation of cyber attacks has also added new urgency. Cyber attacks can now cause electric outages, shut down assembly lines, block customers from placing orders, and break the equipment companies rely on to run their business.

Officials at Lloyd's estimate that cyber-related business interruption could cost businesses as much as USD 400 billion a year. In Aon's "Cyber—the fast moving target" report released in April 2016, participants identified business interruption, both during a breach and post-breach, as the top cyber risk concern. In April 2016, participants concern.

In addition to cyber, one cannot ignore those occurring at a smaller scale, such as arson, a bomb threat, a fire or a power outage, all of which could cause disruptions on a scale equal to a natural hazard or a well-coordinated act of terrorism. In 2014, a contract worker set fire at an airport control center in Chicago, resulting in more than 2,000 flights being cancelled. Incidents like this highlight such vulnerability.

"The risk of business interruption has evolved into a Top 10 risk for global manufacturers due to the increasing complexity of manufacturing processes and reliance on complex global supply chains."

Mike Stankard, National Practice Leader, Heavy Industry/ Manufacturing, U.S.

Rankings in the regions	
Asia Pacific	5
Europe	9
Latin America	2
Middle East & Africa	13
North America	8

Participants in the aviation industry—vulnerable to interruptions caused by inclement weather conditions, computer glitches, mechanical problems, terrorist attacks, power outages and unruly customers—rate business interruption at number two. The same ranking is registered for the lumber, furniture, paper and packaging sector, which depends heavily on natural resources and weather. Both as suppliers and customers, this industry is more susceptible to interruptions that could lead to high cost and loss of customers.

From a regional perspective, organizations in Latin America rank the risk at number two because the region has experienced a range of natural hazards, including droughts, earthquakes, hurricanes, forest fires, tsunamis, and volcanoes. According to a 2016 report by USAID, El Niño and La Niña, extreme phases of natural climate cycles periodically exacerbate the weather conditions there. Unplanned urban expansion, environmental degradation, and poor land-use management also increase populations' vulnerability to natural hazards.

Companies in Asia Pacific also rank it high—the costly earthquakes in Japan, which produced USD 31 billion in losses and the summer floods in China that caused USD 20 billion in damage—have probably contributed to this perception.

As the pace of climate change accelerates, severe weather conditions could become more frequent and unpredictable. This could increase the frequency of business interruption. The interconnectivity of the global economy has amplified the negative impact of a single business interruption event. At the same time, with the emergence of cyber attacks, businesses can no longer use a litany of traditional risk management solutions to handle business interruptions. New innovative solutions are needed.

Even though disasters, both natural and manmade, are not always preventable, having a new and innovative business continuity plan in place can help reduce the impact of both traditional and new emerging risks related to business interruptions. More importantly, risk managers should take a much broader view of risks, both traditional and emerging ones, and address them in a coordinated and holistic way.

Being prepared enables companies to keep running during natural disasters, cyber or terrorist attacks or reputational crisis. While insurance can cover some of the property and operational losses, it cannot make up for the loss of market share, reputational damages, declines in investor confidence, or share price drop caused by an interruption. Therefore, a fortified and robust business continuity plan will boost a company's resilience in the event of a business interruption.



2017	9
2015	15
2013	10
2011	14
2009	18
2007	21

Political Risk/Uncertainties

Political risk/uncertainties is one of the biggest enemy of business. It increases the cost of doing business and long-term investment and trade decisions cannot be made under uncertainty.

Participants in Aon's 2017 Global Risk Management Survey certainly share this view. Political risk/uncertainties, ranked at number 15 in 2015, has now re-entered the Top 10 risk list, at number nine. At the same time, risk readiness has also declined from 39 percent in 2015 to the current 27 percent.

The elevated ranking and decreased risk readiness could be largely driven by the persistent and escalating tumult in 2016, which <u>CNBC</u> called "one of the biggest years for political risks." Interestingly, developed nations, which were traditionally associated with political stability, are now becoming new sources of volatilities and uncertainties that worry global businesses.

The prolonged economic stagnation and overwhelming refugee crisis in Europe spawned the rise of the populism, or far right movement, that could cause turmoil in upcoming elections in countries like France, Germany, and Italy. Of course, the uncertainty of UK's Brexit negotiations not only led to turbulence in the financial market, but also aggravated concerns over the future of the EU. In the U.S., President Trump's pledge to "balance" trade with other countrieshis decision to dismantle the Trans-Pacific Partnership or the TPP, which aimed to slash tariffs and foster trade among 12 Asian and North American countries, and his attempt to renegotiate NAFTA—have increased the prospect of global trade wars.

Rankings in the regions	
Asia Pacific	10
Europe	15
Latin America	5
Middle East & Africa	2
North America	21

In Russia, Vladimir Putin's brand of nationalism is now menacing the Baltic States. Meanwhile, China's continued saber rattling in the South China's Sea has further strained its relations with Japan. The move by the U.S. to deploy a missile defense system known as THAAD to protect South Korea against a belligerent North Korea has put China and the U.S. at a dangerous military tipping point. The Chinese government also initiated a series of retaliatory actions against South Korean companies, forcing many to close their operations in major Chinese cities. Meanwhile, in the Middle East, the on-going civil war in Syria continues to deepen the refugee crisis for Europe and its neighboring countries.

Events like these can no doubt undermine business confidence, deter investment, disrupt their operations and obstruct talent acquisition.

From a regional perspective, companies in the Middle East consider political risk/uncertainties as a number two risk because the region has been wrecked with Islamic extremism, eroding power and influence of the state, faltering oil prices, and age-old sectarian conflicts.

For surveyed organizations in Latin America, political risk/uncertainties is ranked at number five. In Mexico, policies changes in the U.S. have caused jitters in the business community and led to currency fluctuations. In Brazil, political corruption scandals have stalled its economic reforms while Venezuela's economic hardships could give rise to widespread social disorder and trigger instability throughout Latin America.

Aon industry expert view:

"Over the years the rankings have remained relatively stable for the public sector based solely around risks that threaten their ability to continue operations. Government entities will continue to rank political risk/uncertainties and related items that may in any way shut down an essential service as their top risks."

William Becker, National Practice Leader, Public Sector, U.S.

Rankings by industry	
Energy (Oil, Gas, Mining, Natural Resources)	2
Government	3
Agribusiness	5

Participants in Asia Pacific rate political risk/ uncertainty at number 10 amid the rising tension between China and Japan over trade, and territorial disputes relating to the South China Sea. South Korea is facing an election following the impeachment of its president. Meanwhile, North Korea is now destabilizing the region through a series of nuclear and ballistic missile tests, and the Philippines' anti-American policy has altered the geopolitical landscape there.

European companies rank this risk at number 15. However, a detailed analysis indicates that for all European countries, except Italy, the average ranking actually stands at number seven, Italy at number 33. It shows that political uncertainties created by the Brexit vote and several upcoming elections have impacted their risk perceptions. Italian respondents, many representing smaller companies, probably have a relatively high tolerance for political tumult, which has plagued the country in recent years, and their priorities are mostly related to issues like slow economic recovery, immigration, competition and talent shortages.

Surveyed companies in North America also see political risk/uncertainties as a low-level risk because of their confidence in the political institutions and the support by many U.S. companies for Trump's domestic efforts to reduce corporate taxes, increase infrastructure investment and simplify regulations.

For a breakdown by industry, the energy sector lists political risk/uncertainties at number two due to the recent political turbulence and violence in the oil producing and mineral rich countries/regions. Aon's 2017 Terrorism and Political Risk Maps reveal that this sector was the most terrorism-affected sector in 2016, accounting for 42 percent of attacks globally, so the high ranking comes as no surprise. Governmental organizations rank it at number three because political chaos has a direct impact on governmental organizations, in terms of priorities, budgets and reputation.

Political risk/uncertainties will continue to plague companies in the coming years. The biggest source of political risks/uncertainties could be the U.S., where President Trump's new policy initiatives could trigger more controversies both at home and overseas.

Meanwhile, Europe's populist movements are on the cusp of sweeping far-right, nationalist and Euroskeptic parties into power in France, Germany and possibly also Italy. With the UK having triggered Article 50 on March 29, 2017 to start its exit from the EU, more uncertainty across Europe is expected. The relations between the U.S. and Russia, and between Russia and EU remain volatile. In Asia, China's Communist Party will choose its top leaders in 2017 and China's escalating tension with its neighbors could lead to geopolitical conflicts.

The rise of populism and trade protectionism will likely have significant economic and social implications globally, according to various political risk experts. Therefore companies should consistently assess their political and security risks for all the countries and regions in which they operate or transact business, allowing them to make informed decisions and protect their operations and investments.



Rankings in previous surveys

2017	10
2015	8
2013	13
2011	13
2009	9
2007	3

Third Party Liability (including E&O)

For the second consecutive year, third party liability—injury, loss or damage caused to a third party as a result of action, inaction, or negligence—has been cited a significant concern for organizations around the world, at number 10 this year.

Historically, the fluctuations in ranking (from number three in 2007 to number 13 in 2013 and number 10 in 2017) have less to do with an overall reduction in third party liability claims. Rather, they reflect a shift in business objectives. As the economy plunges or recovers, business objectives have followed suit and other risks have taken higher priority.

Experts say third party liability concerns are indicative of a general trend in many jurisdictions toward increasing liability claims. While U.S.-based companies have been known for operating in a more litigious business environment than their peers (U.S. citizens spend about 2.2 percent of gross domestic product, roughly USD 310 billion a year, or about USD 1,000 for each person on tort litigation, the highest in the world, xivi), the influence of U.S.-style risk and legal liability is increasingly evident in Australia, Europe and Latin America.

As the "compensation culture" gains a greater global foothold, the litigiousness of the general public is growing, especially since governments in the emerging economies have broadened their consumer right laws and begun imposing stricter liability on product and service providers. As a result, class or group actions and punitive damage awards are now being increasingly seen in countries outside of the U.S.

In the 2016 Litigation Trends Annual Survey,

Norton Rose Fulbright, an international law firm, polled more than 600 corporate attorneys representing companies across 24 countries. Respondents in North America and Australia listed class action lawsuits as the top litigation issue. The U.K. ranked an overall increase in litigation—including frivolous lawsuits—as a number one concern.xlvii

Meanwhile, regardless of their domicile, organizations that export products and services to the U.S. also must deal with the immediate issue of increased exposure, and must proactively consider the impact on their risk profile.

Rankings by industry	
Conglomerate	1
Government	6
Chemicals	7
Health Care	7
Restaurants	7

As expected, third-party liability is perceived as a number one risk by participants who represent conglomerates, which have experienced a large share of third party class action lawsuits, not only in developed nations, but in emerging markets, where changing laws have made it easier to file claims. In addition, the Norton Rose Fulbright survey revealed a correlation between a company's revenue and its litigation spending, with the median average at 0.1 percent of total revenue.

Aon industry expert view:

"Restaurants traditionally have multiple exposures to third party liability risk from foodborne illness, personal injury, discrimination, liquor liability, and various employment suits. In addition to their own exposure, a franchisor may be held vicariously responsible due to the acts of a franchisee, thus highlighting the importance of correctly managing this risk."

Tami Griffin, National Practice Leader, Food System, Agribusiness & Beverage, U.S. Government entities also consider third party liability as a significant risk due to a rising wave of lawsuits. For example, Governing Magazine says that New York City spends USD 720 million on lawsuits every year, and in 2016, Los Angeles was urged to issue up to USD70 million in bonds to cover some of its large lawsuits. Meanwhile, a group of lawyers in China is suing the Chinese government for its failure to control smog in Beijing.

Other industries that rank third-party liability including error & omissions in the Top 10 list—chemicals, healthcare and life sciences, professional and personal services, construction, and metal milling and manufacturing—have traditionally been known for their heightened exposure to this risk either through the services they provide, or the products they manufacture and sell. For example, studies show that life sciences and healthcare companies around the world have reported the highest incidence of lawsuits against them in recent years.

Geographically, third party liability continues to be a dominant issue for both multinationals and local companies in Latin America. The U.S. Chamber Institute of Legal Reform recently released two reports that examined new and proposed changes to civil legal systems across Latin America and their likely impacts. It identified several troubling trends in the region, including laws that encourage lawsuits with questionable merit, financial incentives to bring mass litigation, and an unbalancing civil justice system that tips the scales between plaintiffs and defendants.xilv

Rankings in the regions	
Asia Pacific	16
Europe	12
Latin America	4
Middle East & Africa	23
North America	12

Overall, experts say that the risk of third party litigation will continue to rise. External factors such as amendments to class action laws in Europe, Asia Pacific and Latin America could further increase the exposure to third party claims. Besides, the proliferation of third party litigation funding (wealthy individuals and companies helping to fund lawsuits that plaintiffs might not otherwise bring) will certainly worsen the situation in terms of frequency and severity.

While the insurance market for third party liability has generally been stable and responsive to risk exposures, businesses should use the combination of sound risk management techniques and a solid supplemental insurance policy to protect themselves against the threat of a third-party liability lawsuit.

Top 10 risks

	2017	2015	2013	2011	2009	2007
1	Damage to reputation/ brand	Damage to reputation/ brand	Economic slowdown/ slow recovery	Economic slowdown	Economic slowdown	Damage to reputation/ brand
2	Economic slowdown/ slow recovery	Economic slowdown/ slow recovery	Regulatory/ legislative changes	Regulatory /legislative changes	Regulatory/ legislative changes	Business interruption
3	Increasing competition	Regulatory/ legislative changes	Increasing competition	Increasing competition	Business interruption	Third-party liability
4	Regulatory/ legislative changes	Increasing competition	Damage to reputation/ brand	Damage to reputation/ brand	Increasing competition	Distribution or supply chain failure
5	Cyber crime/hacking/ viruses/malicious codes	Failure to attract or retain top talent	Failure to attract or retain top talent	Business interruption	Commodity price risk	Market environment
6	Failure to innovate/ meet customer needs	Failure to innovate/meet customer needs	Failure to innovate/ meet customer needs	Failure to innovate/ meet customer needs	Damage to reputation/ brand	Regulatory/ legislative changes
7	Failure to attract or retain top talent	Business interruption	Business interruption	Failure to attract or retain top talent	Cash flow/liquidity risk	Failure to attract or retain staff
8	Business interruption	Third-party liability	Commodity price risk	Commodity price risk	Distribution or supply chain failure	Market risk (financial)
9	Political risk/ uncertainties	Computer crime/ hacking/viruses/ malicious codes	Cash flow/liquidity risk	Technology failure/ system failure	Third-party liability	Physical damage
10	Third party liability (including E&O)	Property damage	Political risk/ uncertainties	Cash flow/liquidity risk	Failure to attract or retain top talent	Merger/acquisition/ restructuring Failure of disaster recovery plan

Top 10 risks by region

	Asia Pacific	Europe	Latin America	Middle East & Africa	North America
1	Damage to reputation/brand	Economic slowdown/ slow recovery	Damage to reputation/brand	Economic slowdown/ slow recovery	Cyber Crime/hacking/viruses/ malicious codes
2	Regulatory/legislative changes	Damage to reputation/brand	Business interruption	Political risk/undertainties	Damage to reputation/brand
3	Increasing competition	Increasing competition	Economic slowdown/ slow recovery	Failure to innovate/meet customer needs	Failure to attract or retain top talent
4	Failure to innovate/meet customer needs	Regulatory/legislative changes	Third party liability (including E&O)	Failure to attract or retain top talent	Regulatory/legislative changes
5	Economic slowdown/ slow recovery	Failure to innovate/ meet customer needs	Social responsbility/ sustainability	Damage to reputation/brand	Economic slowdown/ slow recovery
6	Business interruption	Cyber crime/hacking/viruses/ malicious codes	Political risk/undertainties	Regulatory/legislative changes	Failure to innovate/meet customer needs
7	Cyber crime/hacking/viruses/ malicious codes	Commodity price risk	Regulatory/legislative changes	Increasing competition	Increasing competition
8	Failure to attract or retain top talent	Counter party credit risk	Exchange rate fluctuation	Cyber crime/hacking/viruses/ malicious codes	Business interruption
9	Major project failure	Business interruption	Environmental risk	Exchange rate fluctuation	Weather/natural disasters
10	Political risk/undertainties	Directors & Officers personal liability	Cash flow/liquidity risk	Directors & Officers personal liability	Property damage

 $Note: Where \ ranking \ for \ a \ risk \ was \ tied, \ the \ All \ respondent \ ranking \ was \ utilized \ to \ determine \ which \ risk \ would \ be \ ranked \ higher.$

Top three risks by industry

Industry	Key Risk 1	Key Risk 2	Key Risk 3
Agribusiness	Commodity price risk	Weather/natural disasters	Regulatory/legislative changes
Aviation	Cyber crime/hacking/viruses/ malicious codes	Business interruption	Major project failure
Banks	Damage to reputation/brand	Regulatory/legislative changes	Cyber crime/hacking/viruses/ malicious codes
Beverages	Damage to reputation/brand	Regulatory/legislative changes	Distribution or supply chain failure
Chemicals	Economic slowdown/slow recovery	Increasing competition	Business interruption
Conglomerate	Third party liability (incl. E&O)	Damage to reputation/brand	Economic slowdown/slow recovery
Construction	Economic slowdown/slow recovery	Increasing competition	Major project failure
Consumer Goods Manufacturing	Damage to reputation/brand	Economic slowdown/slow recovery	Exchange rate fluctuation
Education	Cyber crime/hacking/viruses/ malicious codes	Damage to reputation/brand	Regulatory/legislative changes
Energy (Oil, Gas, Mining, Natural Resources)	Commodity price risk	Regulatory/legislative changes	Political risk/uncertainties
Food Processing and Distribution	Damage to reputation/brand	Commodity price risk	Business interruption
Government	Cyber crime/hacking/viruses/ malicious codes	Damage to reputation/brand	Political risk/uncertainties
Health Care	Regulatory/legislative changes	Damage to reputation/brand	Increasing competition
Hotels and Hospitality	Damage to reputation/brand	Economic slowdown/slow recovery	Cyber crime/hacking/viruses/ malicious codes
Insurance, Investment and Finance	Damage to reputation/brand	Regulatory/legislative changes	Cyber crime/hacking/viruses/ malicious codes
Life Sciences	Regulatory/legislative changes	Failure to innovate/ meet customer needs	Damage to reputation/brand
Lumber, Furniture, Paper and Packaging	Economic slowdown/ slow recovery	Business interruption	Commodity price risk
Machinery and Equipment Manufacturers	Economic slowdown/ slow recovery	Increasing competition	Failure to innovate/ meet customer needs
Metal Milling and Manufacturing	Economic slowdown/ slow recovery	Commodity price risk	Increasing competition
Non-Aviation Transportation Manufacturing	Damage to reputation/brand	Increasing competition	Economic slowdown/ slow recovery
Non-Aviation Transportation Services	Damage to reputation/brand	Increasing competition	Economic slowdown/ slow recovery
Nonprofits	Damage to reputation/brand	Regulatory/legislative changes	Economic slowdown/ slow recovery

Top three risks by industry continued

Industry	Key Risk 1	Key Risk 2	Key Risk 3
Power/Utilities	Regulatory/legislative changes	Cyber crime/hacking/viruses/ malicious codes	Damage to reputation/brand
Printing and Publishing	Failure to innovate/ meet customer needs	Damage to reputation/brand	Economic slowdown/ slow recovery
Professional and Personal Services	Damage to reputation/brand	Economic slowdown/ slow recovery	Regulatory/legislative changes
Real Estate	Economic slowdown/ slow recovery	Damage to reputation/brand	Property damage
Restaurants	Economic slowdown/ slow recovery	Damage to reputation/brand	Increasing competition
Retail Trade	Damage to reputation/brand	Increasing competition	Economic slowdown/ slow recovery
Rubber, Plastics, Stone and Cement	Failure to innovate/ meet customer needs	Increasing competition	Commodity price risk
Technology	Failure to innovate/ meet customer needs	Damage to reputation/brand	Failure to attract or retain top talent
Telecommunications and Broadcasting	Damage to reputation/brand	Increasing competition	Cyber crime/hacking/viruses/ malicious codes
Textiles	Economic slowdown/ slow recovery	Counter party credit risk	Damage to reputation/brand
Wholesale Trade	Increasing competition	Economic slowdown/ slow recovery	Counter party credit risk

 $Note: \textit{Where ranking for a risk was tied, the All respondent ranking was utilized to determine what \textit{risk would be ranked higher.} \\$

Risk readiness for top 10 risks

The majority of companies have plans in place to address and manage risks. However, the downward trend that emerged in the previous survey has continued: average risk readiness for the current top 10 risks has dropped from 58 percent in 2015 to 53 percent in 2017. It slipped six percent from the 2013 survey where it was at 59 percent.

Given that the current survey has included the largest number of participants, with better industry and demographic representation, the result is worrisome. Basically, we have surveyed more people than before and they appear to be less ready to manage the top 10 risks.

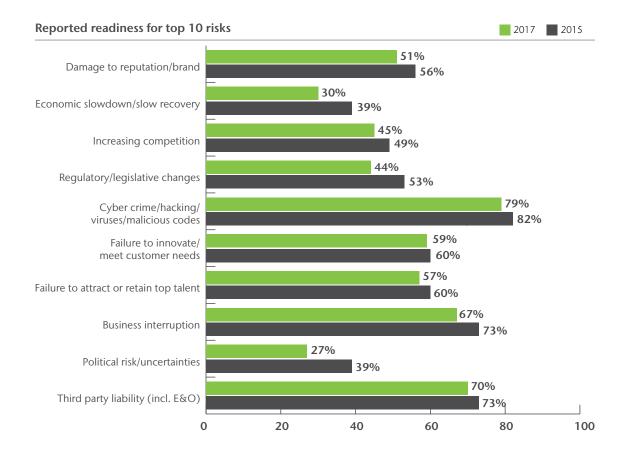
The biggest drop in risk readiness between 2013 and 2017 is for economic slowdown/slow recovery, which has declined from 54 percent to 30 percent. One explanation could be that the uneven and unpredictable recovery of the global economy has made it increasingly difficult to prepare for and mitigate risks impacts. Meanwhile, risk readiness for increasing competition has also experienced a sharp drop, from 65 percent to 45 percent—globalization and the increasing connectivity through the internet of things have intensified competition for global businesses.

It is worth noting that the level of preparedness for the two insurable risks on the top 10 list—business interruption and third party liability—have been above average. At the same time, cyber crime/ hacking/viruses/malicious codes, a partially insurable risk, registers the highest reported readiness (79 percent). The result could be driven by the rising awareness of cyber security in recent years.

Surprisingly, however, surveyed organizations feel the least prepared for political risk/uncertainties, which is also partially insurable. The number stands only at 27 percent, a 12 percent decrease from that in 2015. This could reflect a series of recent events, such as the Brexit vote, the U.S. elections, the political corruption scandals in Latin America, and the wars in the Middle East, all of which have helped create more political uncertainties around the world.

In a breakdown by industry, aviation has improved its readiness by six percent while lumber, furniture, paper & packaging and wholesale trade remain unchanged. However, risk readiness for the rest of the industry groups has slipped. The overall drop could be attributable to the challenges that corporate leadership is facing in managing the constantly evolving and mostly uninsurable risks in times of greater uncertainty.

Geographically, the level of reported preparedness in Asia Pacific has improved, whereas all other regions have shown decreasing levels of readiness. Latin America sits at the bottom of the risk readiness chart.



Average reported readiness for top 10 risks by region

Region	2017	2015	2013
Asia Pacific	66%	64%	63%
North America	63%	69%	60%
Europe	47%	58%	55%
Latin America	46%	57%	55%
Middle East & Africa	58%	68%	75%

Average reported readiness for top 10 risks by industry

Industry	2017	2015	Change
Agribusiness	46%	66%	-20%
Aviation	66%	60%	6%
Banks	59%	69%	-11%
Beverages	55%	N/A	N/A
Chemicals	50%	65%	-14%
Conglomerate	54%	71%	-17%
Construction	40%	51%	-11%
Consumer Goods Manufacturing	49%	63%	-15%
Education	55%	N/A	N/A
Energy (Oil, Gas, Mining, Natural Resources)	62%	72%	-10%
Food Processing and Distribution	52%	62%	-10%
Government	41%	59%	-18%
Health Care	53%	74%	-21%
Hotels and Hospitality	56%	60%	-4%
Insurance, Investment and Finance	64%	60%	4%
Life Sciences	44%	68%	-24%
Lumber, Furniture, Paper and Packaging	64%	64%	0%
Machinery and Equipment Manufacturers	51%	66%	-14%
Metal Milling and Manufacturing	50%	58%	-7%
Non-Aviation Transportation Manufacturing	50%	56%	-6%
Non-Aviation Transportation Services	47%	50%	-3%
Nonprofits	50%	N/A	N/A
Power/Utilities	59%	70%	-11%
Printing and Publishing	35%	N/A	N/A
Professional and Personal Services	51%	62%	-10%
Real Estate	53%	68%	-15%
Restaurants	46%	N/A	N/A
Retail Trade	59%	72%	-12%
Rubber, Plastics, Stone and Cement	49%	58%	-10%
Technology	59%	66%	-7%
Telecommunications and Broadcasting	49%	69%	-20%
Textiles	41%	N/A	N/A
Wholesale Trade	41%	41%	0%

Losses associated with top 10 risks

Contrary to popular belief that the decline in risk readiness normally corresponds with the rise in loss of income, the Aon survey shows that losses from the top 10 risks have decreased as well, from 27 percent in 2015 to 24 percent in 2017, the lowest average percentage of income losses since the beginning of the survey.

The lack of a straight forward correlation between levels of risk preparedness and loss of income can be attributed to the interconnectivities and difficulty quantifying losses related to some of these risks. At the same time, one cannot discount the "luck factor" in terms of losses since our request for insight was based on a 12-month period.

A closer examination of the losses related to the top 10 risk shows that most of the insurable or partially insurable risks—business interruption, third party liability and political risks and uncertainties—have all experienced decreases in losses of income.

For cyber crime, however, the losses have risen slightly. The frequencies and levels of this risk are escalating so fast (hackers are using more sophisticated methods and targeting more organizations) that risk management solutions have not yet been created fast enough to prevent or mitigate losses.

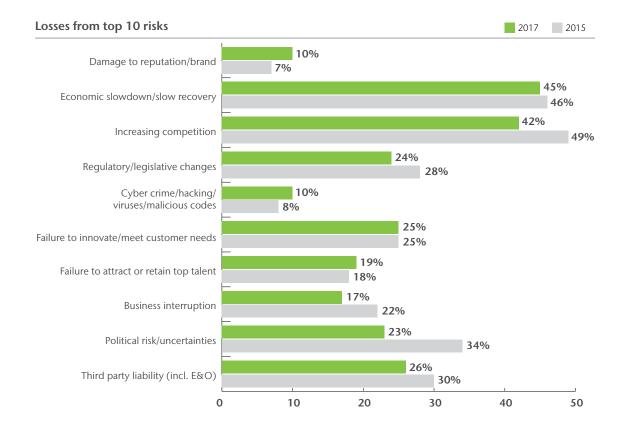
However, in comparison with the other risks on the top 10 list, cyber has actually incurred the smallest losses, along with damage to brand/reputation, at only 10 percent. Losses for these risks could be underestimated since they are sometimes difficult to identify and measure. Again, rising public awareness and the increasing efforts by companies to implement risk mitigation techniques could also be contributing factors.

If we check previous surveys for the loss of income history related to damage to reputation/brand, we will see an interesting trajectory: About nine percent of respondents reported loss of income for damage to reputation/brand in 2009. The percentage jumped to 60 percent in 2011 and then 40 percent in 2013 before dipping to seven percent in 2015 and 10 percent in 2017.

This arc for damage to reputation/brand roughly corresponds with an economic cycle. In the immediate aftermath of the 2009 recession, organizations struggled with their reputation/brand, which was tarnished by a series of government investigations and rising public resentment against corporate greed and massive layoffs. As the economic recovery picks up, public perception is changing and companies have also become more proactive in managing reputational risks.

From a regional perspective, Middle East & Africa is the only region reporting increased loss of income during the last 12 months, probably due to the slow economic recovery, the volatile commodity market and rising political risks there. Other regions have reported their smallest loss of income associated with the top 10 risks.

In a breakdown by industry, participants in the chemicals, conglomerates, energy, insurance, investment & finance, non-aviation transportation services and technology sectors have seen increases in loss of income.



Average reported loss of income from top 10 risks by region

Region	2017—Average loss of income experienced from top 10 risk in the last 12 months	2015—Average loss of income experienced from top 10 risk in the last 12 months	2013—Average loss of income experienced from top 10 risk in the last 12 months
Latin America	22%	27%	39%
Europe	23%	25%	42%
Asia Pacific	23%	29%	41%
North America	24%	29%	43%
Middle East & Africa	31%	28%	50%

Average reported loss of income from top 10 risks by industry

	2017—Average loss of income experienced	2015—Average loss of income experienced	
Industry	from top 10 risk in the last 12 months	from top 10 risk in the last 12 months	Change
Agribusiness	18%	34%	-17%
Aviation	18%	28%	-10%
Banks	23%	33%	-10%
Beverages	21%	N/A	N/A
Chemicals	22%	18%	4%
Conglomerate	23%	20%	3%
Construction	18%	30%	-12%
Consumer Goods Manufacturing	25%	24%	1%
Education	24%	N/A	N/A
Energy (Oil, Gas, Mining, Natural Resources)	30%	24%	6%
Food Processing and Distribution	23%	29%	-5%
Government	17%	25%	-8%
Health Care	29%	31%	-2%
Hotels and Hospitality	27%	32%	-5%
Insurance, Investment and Finance	27%	18%	9%
Life Sciences	19%	23%	-4%
Lumber, Furniture, Paper and Packaging	26%	29%	-3%
Machinery and Equipment Manufacturers	28%	28%	0%
Metal Milling and Manufacturing	23%	27%	-5%
Non-Aviation Transportation Manufacturing	21%	25%	-4%
Non-Aviation Transportation Services	28%	27%	1%
Nonprofits	21%	N/A	N/A
Power/Utilities	25%	27%	-2%
Printing and Publishing	34%	N/A	N/A
Professional and Personal Services	26%	28%	-2%
Real Estate	19%	20%	0%
Restaurants	31%	N/A	N/A
Retail Trade	27%	33%	-6%
Rubber, Plastics, Stone and Cement	19%	31%	-12%
Technology	26%	22%	4%
Telecommunications and Broadcasting	24%	30%	-6%
Textiles	21%	N/A	N/A
Wholesale Trade	16%	22%	-6%

Top 10 risks in the next three years

In every survey, we ask participants to project the top 10 risks facing their organization in the next three years. It is an interesting proposition because their projections not only enable us to gauge what might be on the horizon, but also allow us to compare what they have predicted with the actual results, and see how risk perceptions change and what factors are driving this change.

In the 2015 Aon survey, participants correctly predicted economic slowdown as the number two risk, and political risk/uncertainties as number nine. However, two risks, commodity price and corporate governance/compliance, were projected to be on the top 10 list and have ended up at number 11 and 23 respectively.

Other risks in the 2017 top 10 list were correctly predicted, but not exactly in the right order. For example, participants thought damage to brand and reputation would be at number five, but it has actually maintained its number one spot this year. Cyber crime/hacking/viruses/malicious codes, ranked at nine in 2015 and predicted to be seven, actually has jumped to number five in the current survey. North American companies have rated it as a number one risk. This reflects the fast evolving cyber security landscape and the growing concerns about rampant data breaches that companies have been experiencing since the last survey.

Looking forward to the next three years, an interesting new entrant to the top 10 list is disruptive technologies/ innovation—a groundbreaking innovation or technological product that shakes up the industry or creates a completely new market. It is ranked at 20 in the 2017 survey and with the rapid pace of technological advancement, participants are expecting more game changers like the internet of things or drones in the next three years. Understandably, technology and telecommunications and broadcasting industries predict it to be a number two risk.

For 2020, participants expect economic slowdown/ recovery to be the number one concern. This could indicate their wavering confidence in the current slow economic recovery. Many businesses believe that another recession could strike again following a 10-year recovery and sharp slowdowns in emerging countries such as China. The other top projected risks include: increasing competition, failure to innovate/meet customer needs and political risk/uncertainties. Given the escalating frequency and scales of cyber attacks, cyber crime/ hacking/ viruses/malicious codes will also remain on the top 10 list. Meanwhile, the overall ranking for damage to reputation/brand is expected to fall from number one to number six in 2020.

From an industry perceptive, 31 of the 33 industry groups have reported a projected change in their top risk ranking, with cyber crime/hacking/viruses/malicious codes as well as political risk/uncertainties and disruptive technology/innovation becoming more prominent on the top 10 list, thus validating the fact that risks are always evolving, and organizations must constantly monitor and evaluate them, and make corresponding plans.

2017 Projected 2020



Where current top 10 risks are projected to be in 3 years

Risk description	Risk rank	Top ten risks 3 years from now
Damage to reputation/brand	1	6
Economic slowdown/slow recovery	2	1
Increasing competition	3	2
Regulatory/legislative changes	4	4
Cyber crime/ hacking/ viruses/ malicious codes	5	5
Failure to innovate/meet customer needs	6	3
Failure to attract or retain top talent	7	7
Business interruption	8	21
Political risk/uncertainties	9	8
Third party liability (incl. E&O)	10	16

Top 5 risks in the next 3 years by region

	Asia Pacific	Europe	Latin America	Middle East & Africa	North America
1	Failure to innovate/ meet customer needs	Economic slowdown/ slow recovery	Economic slowdown/ slow recovery	Economic slowdown/ slow recovery	Cyber crime/ hacking/viruses/ malicious codes
2	Damage to reputation/brand	Increasing competition	Political risk/ uncertainties	Political risk/ uncertainties	Failure to innovate/ meet customer needs
3	Regulatory/ legislative changes	Failure to innovate/ meet customer needs	Exchange rate fluctuation	Failure to innovate/ meet customer needs	Failure to attract or retain top talent
4	Increasing competition	Regulatory/ legislative changes	Regulatory/ legislative changes	Failure to attract or retain top talent	Economic slowdown/slow recovery
5	Economic slowdown/ slow recovery	Commodity price risk	Damage to reputation/brand	Increasing competition	Regulatory/ legislative changes

Note: Where ranking for a risk was tied, the Projected All ranking was utilized to determine what risk would be ranked higher.

Top 3 risks in the next 3 years by industry

Industry	Key Risk 1	Key Risk 2	Key Risk 3
Agribusiness	Commodity price risk	Weather/natural disasters	Increasing competition
Aviation	Workforce shortage	Increasing competition	Cyber crime/hacking/ viruses/malicious codes
Banks	Regulatory/ legislative changes	Cyber crime/hacking/ viruses/malicious codes	Damage to reputation/ brand
Beverages	Damage to reputation/ brand	Economic slowdown/ slow recovery	Commodity price risk
Chemicals	Increasing competition	Economic slowdown/ slow recovery	Commodity price risk
Conglomerate	Economic slowdown/ slow recovery	Increasing competition	Major project failure
Construction	Economic slowdown/ slow recovery	Increasing competition	Workforce shortage
Consumer Goods Manufacturing	Economic slowdown/ slow recovery	Increasing competition	Failure to innovate/ meet customer needs
Education	Cyber crime/hacking/ viruses/ malicious codes	Damage to reputation/ brand	Regulatory/ legislative changes
Energy (Oil, Gas, Mining, Natural Resources)	Commodity price risk	Regulatory/ legislative changes	Economic slowdown/ slow recovery
Food Processing and Distribution	Damage to reputation/ brand	Failure to innovate/ meet customer needs	Commodity price risk
Government	Damage to reputation/ brand	Cyber crime/hacking/ viruses/ malicious codes	Failure to attract or retain top talent
Health Care	Regulatory/legislative changes	Cyber crime/hacking/ viruses/ malicious codes	Failure to innovate/ meet customer needs
Hotels and Hospitality	Economic slowdown/ slow recovery	Cyber crime/hacking/ viruses/ malicious codes	Political risk/ uncertainties
Insurance, Investment and Finance	Failure to innovate/ meet customer needs	Regulatory/ legislative changes	Cyber crime/hacking/ viruses/ malicious codes
Life Sciences	Regulatory/ legislative changes	Merger/acquisition/ restructuring	Failure to innovate/ meet customer needs
Lumber, Furniture, Paper and Packaging	Economic slowdown/ slow recovery	Commodity price risk	Political risk/uncertainties
Machinery and Equipment Manufacturers	Economic slowdown/ slow recovery	Increasing competition	Globalization/ emerging markets
Metal Milling and Manufacturing	Economic slowdown/ slow recovery	Commodity price risk	Increasing competition

Top 3 risks in the next 3 years by industry (cont'd)

Industry	Key Risk 1	Key Risk 2	Key Risk 3
Non-Aviation Transportation Manufacturing	Economic slowdown/ slow recovery	Failure to innovate/ meet customer needs	Product recall
Non-Aviation Transportation Services	Increasing competition	Economic slowdown/ slow recovery	Failure to innovate/ meet customer needs
Nonprofits	Political risk/uncertainties	Failure to innovate/ meet customer needs	Regulatory/ legislative changes
Power/Utilities	Regulatory/ legislative changes	Cyber crime/hacking/ viruses/malicious codes	Major project failure
Printing and Publishing	Failure to innovate/ meet customer needs	Failure to attract or retain top talent	Cash flow/ liquidity risk
Professional and Personal Services	Economic slowdown/ slow recovery	Failure to attract or retain top talent	Damage to reputation/ brand
Real Estate	Economic slowdown/ slow recovery	Property damage	Failure to innovate/ meet customer needs
Restaurants	Economic slowdown/ slow recovery	Damage to reputation/ brand	Workforce shortage
Retail Trade	Economic slowdown/ slow recovery	Increasing competition	Failure to innovate/ meet customer needs
Rubber, Plastics, Stone and Cement	Economic slowdown/ slow recovery	Increasing competition	Failure to innovate/ meet customer needs
Technology	Failure to innovate/ meet customer needs	Disruptive technologies/ innovation	Failure to attract or retain top talent
Telecommunications and Broadcasting	Failure to innovate/meet customer needs	Increasing competition	Disruptive technologies/innovation
Textiles	Economic slowdown/ slow recovery	Increasing competition	Failure to innovate/ meet customer needs
Wholesale Trade	Increasing competition	Economic slowdown/ slow recovery	Commodity price risk

Note: Where ranking for a risk was tied, the Projected All ranking was utilized to determine what risk would be ranked higher

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Methodology

This Web-based survey addressed both qualitative and quantitative risk issues. Responding risk managers, CROs, CFOs, treasurers and others provided feedback and insight on their insurance and risk management choices, interests and concerns.

Aon Centre of Innovation and Analytics conducted, collected and tabulated the responses. Other Aon insurance and industry specialists provided supporting analysis and helped with interpretation of the findings.

All responses for individual organizations are held confidential, with only the consolidated data being incorporated into this report. Percentages for some of the responses may not add up to 100 percent due to rounding or respondents being able to select more than one answer. All revenue amounts are shown in US Dollars.

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