

The new digital ecosystem reality: Managing risk to enable strategy

Technology Institute

September 2014

Facing multiple facets of risk, enterprises should consider shifting from being reactive to being proactive

Technology executives' current practices for managing risks may be insufficient for today's and tomorrow's market place for three key reasons:

- the pace of change is increasing at an unprecedented rate and executives may find real-time risk information critical in making informed strategic decisions;
- the complexity of global networks is resulting in companies dealing with new risks that they have not had to manage before;
- the lines between industries are becoming blurred as companies increasingly leverage technology to drive new or enhanced revenue or to transform their operating models.

Consider this evidence from multiple PwC studies, all indicating an increased level of concern about risk management among board members, investors, and executives:

- In PwC's 6th annual Digital IQ survey¹, conducted in late 2013, one of the top three emerging technologies is cybersecurity in

The New Digital Ecosystem Reality is a series providing PwC's perspectives relative to the trends and challenges that businesses should consider to remain competitive. PwC has identified nine key technological, economic, and political trends for CEOs to consider. In this article, we look at the world of risk management, and how it is affected by three of those trends: disruptive innovation, managing cost and complexity, and convergence.

direct response to increasing cyber risk.

- A survey of investors conducted for PwC's Center for Board Governance², also in 2013, revealed that investors rank risk management no. 1 in importance.
- In PwC's 17th Annual Global CEO Survey³, conducted in February 2014, 84% of technology executives said they are either planning a change in the way they manage risks or have already started this change.

- A study⁴ conducted by Strategy& (formerly Booz & Company) in 2012 revealed that underestimating strategic risk is the no. 1 cause of shareholder value destruction.
- A study by PwC and the MIT Forum for Supply Chain Innovation conducted in 2013 shows that companies with mature risk and supply chain management capabilities significantly outperform companies with immature risk and supply chain capabilities in market value, sales revenue, and market share.

² [http://www.pwc.com/us/](http://www.pwc.com/us/DirectorInvestorComparison)
DirectorInvestorComparison

³ [http://www.pwc.com/gx/en/ceo-](http://www.pwc.com/gx/en/ceo-survey/)
survey/

¹ [http://www.pwc.com/us/en/advisory/](http://www.pwc.com/us/en/advisory/digital-iq-survey/downloads.jhtml)
digital-iq-survey/downloads.jhtml

⁴ [http://www.strategy-](http://www.strategy-business.com/article/00146)
business.com/article/00146

In technology companies where the executive's primary attention and priority is towards innovation and speed to market, risk management generally takes a back seat. Moreover, the discipline of risk management may fall to a lower priority with many in the fast-moving and highly competitive technology sector. There, strategists, as well as financial and operations executives have come to associate risk management, often forced on them as an oversight function, with low value damage control, or worse as an obstacle to effective business execution. Experienced risk practitioners know the opposite should be true. In fact, "the word 'risk' derives from the early Italian *risicare*, which means 'to dare.'"⁵ Effective risk management empowers executives to dare in a way that puts the odds of success squarely in their favor. Effective Risk Management therefore is not just about risk mitigation, but should also be about driving incremental

value to the company, including new revenues.

Being aware of risks is one thing; taking specific action to address them head on is another. Many companies have tended to look at risk management as something they should react to, rather than something that they should build into the company culture.

The problem with this mindset is – with the facets of risk constantly shifting – solely reacting to change may no longer be a viable course of action. Companies frequently have neither the resources nor the energy to constantly address issues relating to managing strategic risks. This reactionary posture has contributed to the destruction of shareholder value by underestimating strategic risks.

It's also important to recognize that risk has both positive and negative impacts. A company that thinks

about its risks in advance may hold a distinct advantage over a company that only reacts to risks as it encounters them. Those companies that are proactive may be more likely to both out respond and outperform their peers. Since risk is closely associated with unpredictable circumstances, effectively understanding and managing risk can decrease negative impacts and increase potential opportunities. The challenge is recognizing and capitalizing on the right risks, and managing both upside and downside impacts. This capability is what separates the consistently great companies from the rest of the pack.

For companies to manage and monitor risk more effectively across all areas of operations, they may benefit by applying proactive methods of risk identification, risk prioritization and risk response. Executives may want to establish a more holistic risk management strategy to embrace the spectrum of business risk, one that leverages what PwC refers to as the *Risk & Compliance Lifecycle*. This approach should link together a variety of other core business process activities; activities that up until now have too often either been ignored or given limited consideration when weighing risk.



⁵ Peter L. Bernstein, *Against the Gods: The Remarkable Story of Risk*

The path to risk lifecycle management and how PwC can help

To change the way companies think about and analyze risk, PwC has defined the Risk & Compliance Lifecycle, one that creates a holistic and virtuous loop of activities for being responsive and operationally efficient when it comes to aligning strategic, financial, and operational objectives with the concepts of risk management. It's important to note that while the lifecycle has five main components, they should be looked at as systemic and symbiotic, rather than sequential. Additionally, the impact of each component can be enhanced by risk technology that drives efficiency and enables big data analytics.

No. 1: Assess. A robust risk management program should begin with understanding the company's strategic objectives, and identifying the risk profile of each option for

executing those objectives. In order to do this, companies should possess a deep understanding of the industry specific risks that affect achievement of strategic goals. To be clear, this capability is beyond the grasp of traditional Enterprise Risk Management (ERM) efforts. As the 2012 Strategy& study shows, 81% of the events that caused the greatest loss in shareholder value were strategic blunders that were not detected by the companies' ERM program.

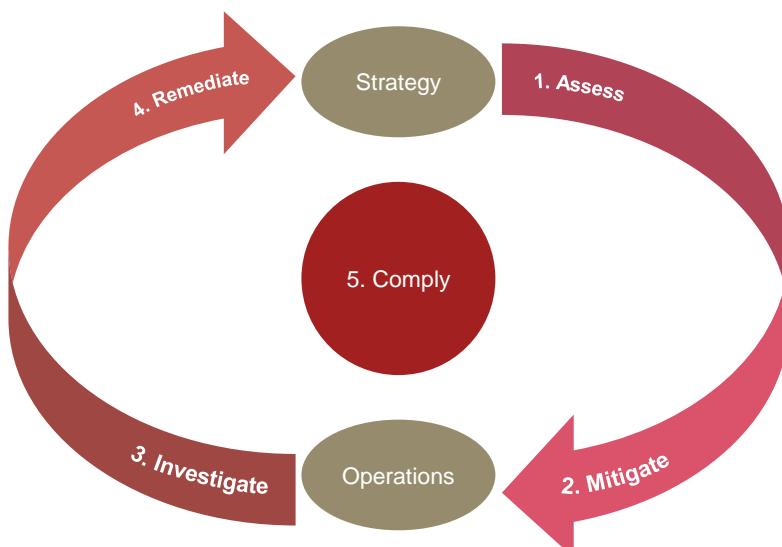
In addition to having the tools, methods, and experience to uncover strategic risks, a company should also be able to apply performance management techniques, such as linking and aligning objectives to the enterprise's appetite and tolerance for risk, and taking specific care to look at the management and allocation of capital. Finally, a company should have access to resources to dig deeper and find ground truth when red flags are raised.

No. 2: Mitigate. Once a risk is identified and thoroughly assessed, a company can make one of four decisions on how to deal with the risk: (1) accept/embrace it; (2) avoid it; (3) transfer it (i.e. via insurance); or (4) mitigate it. While implementing and monitoring controls is one mitigation technique, to truly avoid strategic blunders, a company should address the financial and operational aspects of what they do, and do something differently. Actions such as changing the way that cash flow is managed (especially to be able to seize opportunities), the way that currency risk is managed, developing a more resilient supply chain, or transforming the way the company operates to enable achievement of the strategic objectives may help companies address strategic risks.

Done well, identifying areas for improvement within established business processes can also reduce volatility, enhance efficiency, and increase effectiveness of controls. Finally, a more holistic approach to risk assessment and mitigation efforts may give management the opportunity to identify and accept the appropriate risks that may help drive growth.

No. 3: Investigate. PwC provides our clients multiple specialized approaches to help them respond to crises, including Investigative Services and Cybercrime solutions. While these solutions may provide a rapid response to problems, they address both acute and chronic issues. They define short-, medium-, and long-term actions required to investigate and resolve the crisis, and also identify related consequences to the stakeholders

The Risk & Compliance lifecycle and how PwC can help



who are affected. Root-cause analysis is a critical element in creating a smarter organization. There should also be processes in place for validating that the problem is no longer happening; for confirming that its underlying causes have been mitigated; and changing the behaviours of users based on the updated mandates.

Besides response effectiveness, companies should think about the part of the process lifecycle related to continuous improvement. What good is a new way of dealing with risk if it forces employees to reinvent those methods with each new event? Companies should build and encourage the capability to both respond to and consistently learn from incidents and crises. All companies inevitably encounter problems – the ability to routinely identify the key lessons from negative events and then act accordingly separates success from mediocrity. This capability should apply both to incidents within the company and within the industry, so that companies learn from both their own missteps and the missteps of competitors. This is especially true in the high paced technology sector where failure may equal learning, and a company may be able to improve quickly by applying what it learned into a new way of doing business – which is exactly how companies improve fast.

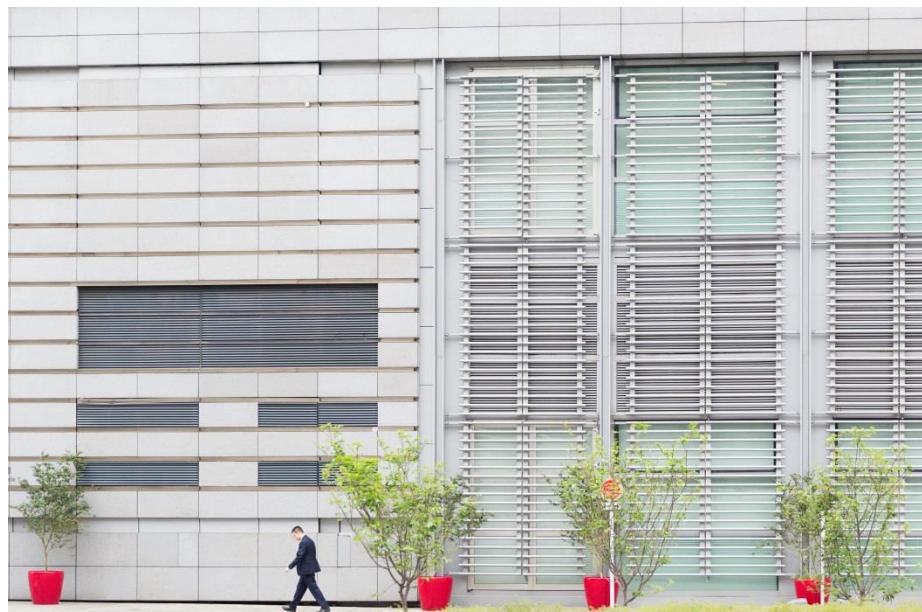
No. 4: Remediate. Enterprises should create a structure for addressing the design and implementation of event remediation to rebuild the lost value and to prepare the company to be more resilient to future events and opportunities. PwC helps companies understand how they can recover

from events such as corruption and violation of regulatory controls, and helps them implement operating processes that may allow the company to use learnings from events to inform new strategic decisions. PwC also helps companies put tools in place that allow for better insight and control into the most common violations in each given industry.

No. 5: Comply. In order to assure long term success and stability of a company, compliance and oversight activities should be integrated with risk management activities. PwC helps companies develop compliance programs tailored for their specific needs. PwC also provides direct support to companies in building-up and improving their Internal Audit functions, a critical capability in the fast moving tech sector. PwC helps companies address all three lines of defense (the business, risk and compliance functions, and internal audit).

An emerging and critical challenge for the industry is that regulators are introducing new compliance challenges that not only directly affect tech companies (i.e. conflict mineral regulation) but also the regulations on their customer set are getting passed down to them (i.e. data protection regulations in the Financial Services sector).

Compliance programs properly architected to address these challenges may not only avoid the downside of regulatory violations, but may also provide competitive advantage in helping customers meet their regulatory requirements.



Challenges of adopting risk & compliance lifecycle management

Companies may already have established some or all of the aforementioned capabilities. What's frequently missing, however, is the improvement that comes from tying (or aligning) these five core areas together in a way that considers both upside and downside impacts across the value chain. Frequently, these efforts are disconnected, siloed and inefficient. By applying a more holistic and connected perspective, companies may benefit from a systemic perspective about risk, and may be able to create and demonstrate value to both internal and external stakeholders.

Once a company has developed and embedded a holistic view of its risk profile and posture, and created

leading practices to follow consistently, it has the potential to work more efficiently and derive a strong competitive advantage over other companies without holistic views. It also has the tools necessary to drive enhanced decision making capabilities up and down the company so that management is equipped to make the right decisions about taking appropriate risk in order to drive maximum value and deliver against strategic targets.

Executives will likely continue to face this challenge in the future. The increase in global stakeholder expectations and business complexity means that the impact of an event is higher than ever. The convergence of industries means that there are many more opportunities for significant value creation, but the decision time to take advantage of these opportunities is decreasing. All this is happening at the same time as

risks such as cybersecurity are growing exponential around the globe. Wins and losses are now measured in billions of dollars, not millions, which is why risk management is the top concern of investors and why savvy technology executives are fundamentally changing the way their company manages risk.

Implementing a Risk & Compliance Lifecycle Management approach doesn't create a company that avoids risks, but has the potential to create a more informed one that avoids strategic blunders. Such a company may also be more resilient because it may understand and make the most of risks and opportunities to build sustainable competitive advantage and enable executives to dare with greater success.

The issue of siloed organizations driving inefficiencies is particularly acute in the technology sector, where companies have grown so fast and so diversified that organizational barriers often prevent effective risk management. In addition, the blurring of lines between the second (risk and compliance) and third (internal audit) lines of defense is causing confusion on accountability of risk. Taking a holistic view of the Risk & Compliance Lifecycle can resolve these problems.

PwC can help

If you would like to discuss managing risks for today's and tomorrow's market place, please contact one of our practice leaders:

Kevin Keenan

Principal
310.848.5524
kevin.j.keenan@us.pwc.com

Princy Jain

Principal
408-307-2888
princy.jain@us.pwc.com

David Marston

Partner
415.606.8182
david.l.marston@us.pwc.com

Let's talk

Please reach out to any of our technology leaders to discuss this or other topics. We're here to help.

Tom Archer

US Technology Industry Leader
408 817 3836
thomas.archer@us.pwc.com

Cory Starr

US Technology Assurance Leader
408 817 1215
cory.j.starr@us.pwc.com

Kayvan Shahabi

US Technology Advisory Leader
408 817 5724
kayvan.shahabi@us.pwc.com

Diane Baylor

US Technology Tax Leader
408 817 5005
diane.baylor@us.pwc.com

About PwC's Technology Institute

The Technology Institute is PwC's global research network that studies the business of technology and the technology of business with the purpose of creating thought leadership that offers both fact-based analysis and experience-based perspectives. Technology Institute insights and viewpoints originate from active collaboration between our professionals across the globe and their first-hand experiences working in and with the technology industry. For more information please contact Tom Archer, US Technology Industry Leader.