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Black swans turn grey

The transformation of risk

Risk Practices:

Mapping out what's different in today's risk landscape and determining how to adapt

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1. Mapping out the new risk landscape

Risk is changing: how and why?

In 2007, the author Nassim Nicholas Taleb[1] put forward the concept of 'black swans': unforeseen risk events that have a major impact, such as the September 11 attacks or the Indian Ocean tsunami of December 2004. This idea has rapidly taken hold, and has been applied to recent events ranging from the credit crunch to BP's Deepwater Horizon oil spill to the Arab Spring. Today, 'black swan' events like these are regarded as one of three types of risks that organisations face.

The first is 'known risks' that companies can identify and plan for, in an effort to avoid or mitigate them. The second is 'emerging risks' that have come onto the radar, but whose full extent and implications are not yet completely clear. The third is black swans, which hit businesses and even society as a whole without warning, meaning they cannot be predicted or avoided.

By their nature, black swan events should only occur at unpredictable intervals. Yet recent experience suggests events that fit the definition of black swans are happening more and more frequently. So, are black swans actually turning grey? Rather than being infrequent 'outlier' events, are they now just part of a faster-changing and more uncertain world? These questions inspired the title for this paper.

Today's fast changing world creates more uncertainty for organisations – and makes it harder for them to understand where new risks are going to come from.

Fundamental shifts

Whatever words we use to describe risks, it's clear that the risk landscape facing companies is changing. Organisations and boards responsible for managing risk can see that a new risk landscape is emerging. But it's often difficult for them to define what's behind the changes, or how they should respond to them.

The first step towards making the right responses is to map out what's different in today's risk landscape and to determine how to adapt to these differences. That's our aim in this paper, the first in a series on risk and resilience.

We are very aware that any discussion on risk can be seen in a negative light. We want to demonstrate that through understanding and managing risk better, companies are better placed to pursue their strategy, including a strategy for growth, with the confidence that they have the business resilience to manage known risks and respond to the unexpected.

[1] *The Black Swan: The Impact of the Highly Improbable by Nassim Nicholas Taleb, 2007*

From control to uncertainty

So, what are organisations that we speak to telling us about the risk landscape? Essentially that they see the world moving from a past in which boards believed they could manage and control risks, to a present where established risk approaches are often being outflanked and outpaced.

Asked to define the changes now taking place, many board members point to three main shifts:

The first is that they feel the risk frameworks and processes that are currently in place in their organisations are no longer giving them the level of protection they need.

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The second is that they are seeing rapid increases both in the speed with which risk events take place, and the extent to which their impacts on the business are 'contagious', meaning they spread at pace across different categories of risk. They are especially concerned about the speed and contagion of 'catastrophic' risks, which can threaten an organisation's very existence and even undermine entire industries.

2

The third shift is that boards feel they are spending too much time and money on running their current risk management processes, rather than moving quickly and flexibly to identify and tackle new risks. As a result, some are not convinced that their return on spending on Enterprise Risk Management (ERM) frameworks is fully justified by the level of protection they gain from them.

3

Three areas of risk

These doubts over the current returns on companies' investments in ERM don't detract from ERM's wider value to the organisation. Neither do they reduce the critical role that ERM plays – and will continue to play – in monitoring and managing certain types of risk. But the emergence of new risks, and the increasingly uncertain world in which today's companies operate, mean new elements need to be incorporated to expand and reinforce the established frameworks.

In most organisations, the existing approach has involved dividing risk into three main categories: financial, operational and strategic.

Financial risk

This is an overall term for risks related to any form of financing - including the risk that a company will not have enough cash to stay solvent. Financial risks may also include credit, market, insurance, liquidity, currency and/or commodity risk.

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Operational risk

This generally refers to the risk of failures in operational processes and systems, including IT or power outages, plant and machinery breaking down, or logistical, safety or environmental problems.

2

Strategic risk

Strategic risk may spring from a failure to respond to shifts in the organisation's external economic, political or regulatory environment, and includes legal and compliance risks. Alternatively, it may result from changes and/or flawed risk assumptions in the organisation's strategy.

3

In our experience, companies have generally done a good job of focusing on the first two of these risks – financial and operational. But they have often been less successful at linking these risk categories together, or understanding the interdependencies between them. And many businesses have focused much less attention on strategic risk, largely because they regarded risk and strategy as separate from each other, rather than seeing risk-taking as a key part of value creation in any business.

Given the changes that we've described in the risk landscape, it's increasingly clear that an approach that puts risks in separate compartments and fails to cover all of them is no longer fit for purpose. This tendency has resulted in a widening gap in organisations' risk coverage, as highlighted by the recent 'Roads to Ruin' report[2] produced by Cass Business School on behalf of The Association of Insurance and Risk Managers ("Airmic") (see information panel below). The implication is that large organisations may now have blind spots from which high-impact risks could emerge to damage or potentially destroy their business.

> ***"… large organisations may now have blind spots from which high impact risks could emerge…"***

'Roads to Ruin': the perils of unrecognised and unmanaged risks

The Association of Insurance and Risk Managers (Airmic) commissioned Cass Business School to analyse 18 high-profile corporate crises that occurred during the past decade. Seven of these resulted in the company involved facing bankruptcy, with three eventually being 'rescued' by government. In 11 of these crises the Chairman and/or CEO lost their jobs, and in four cases executives received prison sentences. All of the companies were damaged.

The report found that these crises all involved deep-seated – and often unforeseen – 'underlying risks', which were dangerous in four ways:

- Many posed a potentially lethal threat to the continued existence.
- When they materialised, the risks often caused serious, sometimes devastating and almost always uninsurable losses to the business, its reputation and its owners, while also putting the positions of the CEO and/or Chairman under threat.
- Many of these risk events helped to transform serious – but potentially manageable – crises into catastrophes that destroyed reputations and licences to operate.
- Most of these risks are both beyond the reach of current risk analysis techniques, and also beyond the remit and expertise of typical risk managers. Unidentified and therefore unmanaged, these risks remain unnecessarily dangerous.

[2] *Roads to Ruin – A Study of Major Risk Events: Their Origins, Impacts and Implications by Cass Business School for Airmic, 2011*

Facing up to the new threats

The potentially catastrophic impacts highlighted in the Airmic report underline the emergence of new types of risk in a more interconnected world. Organisations today face an environment where known or identified risks are surrounded by areas of ignorance or uncertainty; where organisations' sustainability and licence to operate are under constant and close scrutiny; and where global risks emerge rapidly, can spread quickly across traditional risk categories, and are often impossible to control or even identify clearly.

Under current risk management thinking, a risk that cannot be identified cannot be managed. In the new environment that we've described, this view of risk becomes a major problem. To try and address it, companies are developing ever more sophisticated approaches to risk data collection and analysis, in an effort to capture, predict and address the expanding range of risks they face.

Yet collecting more data does not necessarily give more protection. Some audit committee members tell us that they now receive so much risk information that it's actually becoming harder to see to the heart of their organisation's risk issues. And the changes in the wider environment means the value of a company's own historical data – while useful as an indicator of future risk events – needs to be supplemented.

Partly as a result, some organisations are beginning to question if these new 'risks' are really risks at all, but something different: a new and unprecedented level of uncertainty that goes beyond traditional concepts of risk, largely resulting from rising global connectivity.

Ultimately, it doesn't really matter whether today's new risks are still 'risks' in the traditional sense. What matters is the growing size, unpredictability and variety of the threats to organisations and their stakeholders. In our view, businesses need to respond to these changes by identifying and adopting new, more holistic and more agile approaches to managing risk and uncertainty. We'll now examine the implications of this change for organisations' existing risks frameworks, with a focus on low – probability, high impact risk events.

2. New approaches to risk and uncertainty

Today's risk frameworks need to evolve

If, organisations are currently ill-prepared for the new risk landscape, it follows that their existing risk management approaches and mechanisms may be falling short. PwC believes that new risk management approaches are needed to complement existing frameworks.

In what way?

PwC recently conducted a qualitative research study into how various multinationals have responded to low-probability, high-impact risk events. This study revealed the following key findings:

The boards of big organisations do not fully understand the risks that they are running…

… or how the knock-on impacts can spread across risk categories.

In the Internet age, speed and prejudice are all.

Information moves instantaneously around the world, and opinion morphs into accepted 'fact'. So corporations must hit the ground running with the right responses delivered at pace. All too often, they're caught on the back foot.

Checks and balances at board level are critical.

Does the board have people with enough industry expertise to ask tough questions about executives' decisions? In many cases the answer is no. Even the most sophisticated approach to risk can be undermined by a lack of industry insight.

Leadership and culture shape an organisation's attitude to risk.

There is frequently a gap between what management says about risk and what it does. Are the CEO and board setting the right behavioural example and risk-aware culture, in line with the corporation's strategy? Do rewards encourage risk-based thinking and behaviour?

ERM under the spotlight

The findings of our study suggest that the current approaches to risk management in many organisations are no longer sufficient. So they need to evolve and expand the existing frameworks and tools they use.

This need for change is throwing the spotlight onto Enterprise Risk Management (ERM). Currently used by most major corporations, ERM was developed in response to the emergence of a more complex risk landscape, with a focus on providing stronger control over operational and financial risks. Organisations applying ERM have tended to invest less in aligning risk to corporate strategy or focusing on the uncertain. Consequently, ERM remains grounded culturally in a world where risk events could be predicted – and their impacts controlled – with a fair degree of certainty. That world is fast disappearing.

Supporters of ERM stress that, if properly implemented, ERM is fully equipped to manage today's greater diversity of risks and the closer interdependency between them. However, in many cases there are concerns that the way ERM is being applied and run can actually hamper the organisational agility – and the personal behaviours and sense of responsibility – that businesses need in today's more uncertain environment.

ERM under the spotlight *(continued)*

For example, some critics claim that ERM can encourage a box-ticking, process-led approach to managing risk. If this comes about, it may lead front-line staff to see risk as separate from their own business decisions, and as the responsibility of the risk function rather than themselves. While the risk register compiled to guide and underpin ERM provides a helpful snapshot of the organisation's risks, there is a danger that it can distract attention from the linkages and contagion between the different categories.

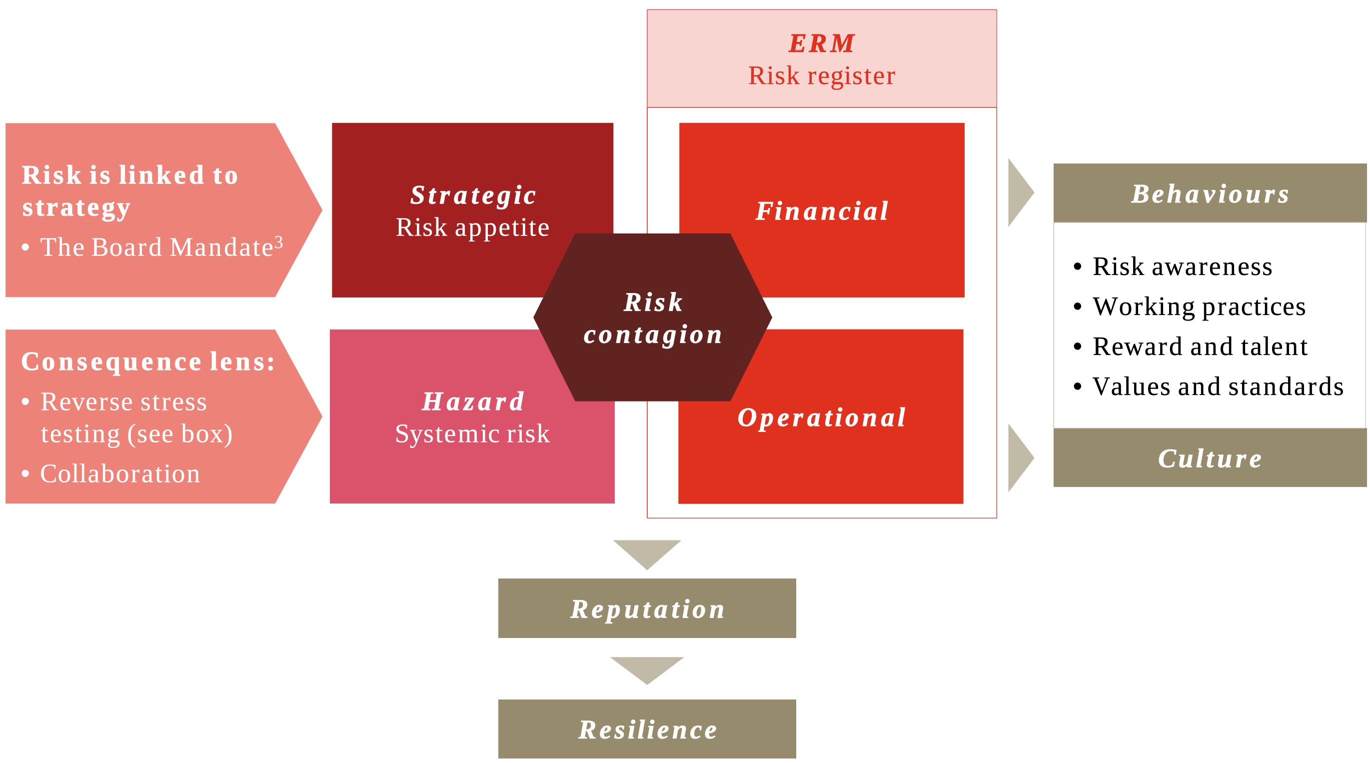
Overall, the message is clear. The risk landscape that has now emerged means organisations need to be agile and innovative in the way they approach risk. These qualities have long been accepted cornerstones of corporate strategic planning and execution. Risk appetite is not explicitly defined, nor is it used to determine a strategic approach to risk. This now needs to be applied to an overall approach that aligns strategy and risk. Figure 1 illustrates how a board can address this challenge.

The first step is to create a clearly-articulated 'board mandate', as proposed in a recent report by Tomorrow's Company[3]. The mandate captures the 'essence' of the 'character' that makes the company distinctive, and provides a clear view of the board's attitude to integrity, risk and safety, and of its environment, culture and value proposition. This in turn provides the setting for the organisation to bring together the existing strengths of ERM in managing operational and financial risks, with the additional agile and adaptable techniques demanded by the newer and less predictable dynamics of strategic and systemic risks.

Figure 1 tries to capture this within one overall framework. Financial and operational risks are the prime focus of the ERM system, risk and strategy are linked through the use of risk appetite, and systemic risks can be better understood through the use of the consequence lens. If properly embedded this should help protect the reputation of the company and enhance its resilience ***provided that*** the right behaviours and culture are in place across the whole organisation.

When fused together, these components can enable boards to make the right responses to today's blend of contagion, connectivity and speed in the risk landscape, thus helping to build a trusted reputation and organisational resilience.

Figure 1: The role of the board



[3] *Tomorrow's Company - The Case For the "Board Mandate"*

Reverse stress-testing: preparing for consequences – not predicting causes

With the growing uncertainty in the risk landscape, a technique that is being used increasingly in both the public and private sectors is 'reverse stress-testing'. This approach effectively accepts that it is no longer possible to forecast events themselves, and instead focuses on managing their knock-on effects or consequences.

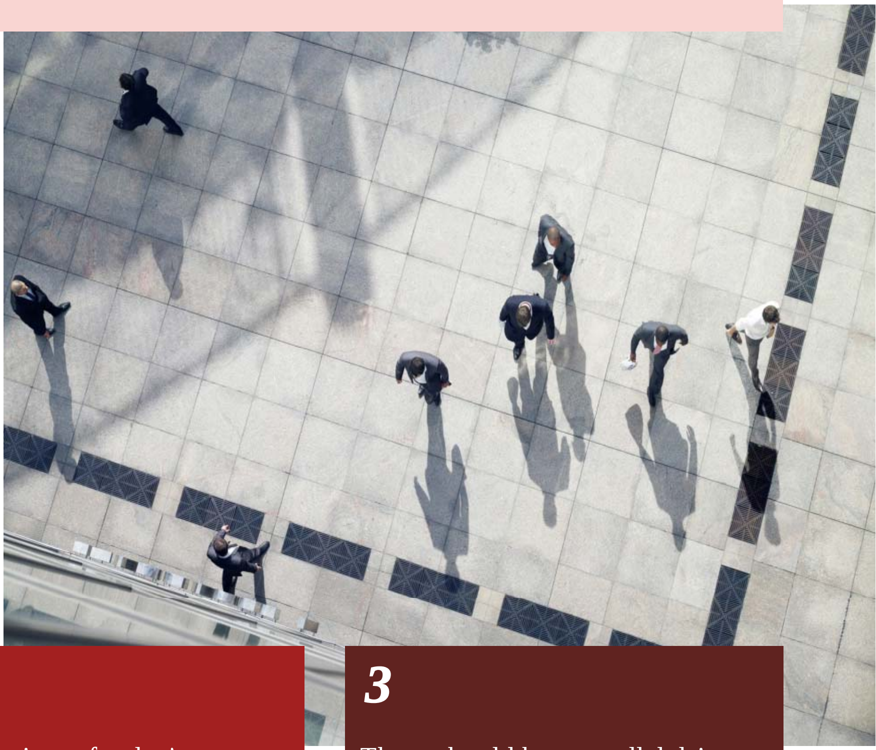
To pick recent examples, an airline might test out the impact of most of Europe's airspace being closed down (as occurred with the volcanic eruption in Iceland), or a bank might model the effect of a major counterparty collapsing (Lehman Brothers) or a Euro member country defaulting. Reverse stress-testing is proving to be a very effective way of focusing on extreme events and protecting organisations against 'unknown' risks.

Three steps beyond ERM…

So, assuming we'll all continue to live in a world where predicting and controlling all risk events and their impacts is no longer possible, what is an appropriate approach for managing risk?

In our view, most organisations should look to build on their current ERM frameworks by making three changes to the way they frame and think about risk.

1. Developing a risk aware culture
2. Explicit focus on risk appetite
3. Alignment of risk and strategy



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There is a need to move away from merely identifying, measuring and prioritising the various risks to the organisation, and towards a broader focus on the resilience of whole systems within which it operates and contributes value. These systems include the organisation's industry, political and financial environments. This means progressing from explicit risk controls to a risk-aware culture in which risk is managed in a coordinated way across different interests, organisational units and external relationships.

2

The uncertainty of today's environment means that solely analysing historical data is no longer a reliable way of predicting future events and impacts. So the board needs to be more explicit about the organisation's risk appetite in pursuing its strategy, and to build awareness at all levels of what risks it is willing to bear. Some employees may regard risk management as someone else's problem and a distraction from their day job. In fact, it must become part of everybody's job, every day. Also, many non-executives voice frustration that the executives on their boards are too cautious in terms of risk – so greater clarity on risk appetite would aid board effectiveness.

3

There should be a parallel drive to integrate risk and strategy, and to embed a risk-aware culture, behaviours and beliefs at all levels. Ideally, both of these strands will be led and championed by the Chief Strategy and/or Chief Risk Officer or equivalent, who should report directly to the CEO and even in some cases have a seat on the main board – a structure that is all too rare outside the financial services sector. Having the risk agenda represented at board level will also help to remove barriers traditionally placed between financial, operational and strategic risk, and encourage a more holistic view.

... towards risk resilience

In combination, these actions should help the organisation realise four important benefits that will help it to progress from managing specific risks to achieving wider resilience to risk events. These benefits are:

- A holistic and flexible perspective on risk and uncertainty, and an approach for managing them that is more closely integrated with the business strategy – and which recognises that the organisation's risks are constantly changing.
- Clearer ownership of risks at leadership levels – with risk awareness and accountability shared across the organisation through a common risk culture.
- A greater ability to influence and shape personal behaviour. As the accompanying information panel below highlights, even the biggest global corporations are now critically exposed to the actions of any individual employee anywhere in the world. Enhanced risk ownership, awareness and culture help organisations to manage this exposure.
- A higher market rating. There's growing evidence that businesses that are seen to truly embed a risk-aware culture and behaviours are valued more highly by the markets – enjoying a rating premium of up to 20%[4].

By evolving and expanding their risk management frameworks, organisations can achieve wider resilience to unforeseen events.

Individual behaviour – global impacts

A wide array of developments including rising risk contagion, increasingly global supply chains, the worldwide 'goldfish bowl' created by the Internet, and the need to comply with regulations such as the UK Bribery Act and US FCPA mean that actions by one individual can inflict ever greater damage on any organisation. So, for example, an employee negotiating a supplier or customer contract in an emerging market needs to be aware and incentivised not only around commercial risks such as price and fulfilment, but also around ethical and legal risks ranging from child labour to environmental protection to money laundering.

On top of these benefits, an interconnected and holistic approach to risk, properly communicated, will help explain to external stakeholders such as customers and suppliers how the business can become more resilient to nasty shocks. Additionally, linking the concept of organisational resilience with the opportunity to use collaboration to enhance resilience across systems or industries will also better position the business against wider systemic risks. We will return to this idea in our next paper in this series.

[4] *The Value Of Enterprise Risk Management by Robert E. Hoyt And Andre P. Liebenberg, April 2011*

3. A blueprint for 'ERM-plus'

As organisations seek to adapt to today's more uncertain and fast-changing risk landscape, current ERM-based risk management frameworks provide a sound base on which to build.

Our view is that companies should evolve and expand their existing frameworks by innovating around them, and adding tools and techniques such as scenario modelling, predictive indicators and 'reverse stress-testing'.

Crucially, the ultimate responsibility for driving and embedding this change lies not with the risk function, but with the board. Its role involves building on ERM to fuse strategy more closely with risk, debate and articulate a more explicit and holistic risk appetite, and investigate collaboration to foster wider resilience across systems.

With these elements in place, the board is well equipped to embed the right risk culture and behaviours, supported by an appropriate reward structure. The resulting awareness and scrutiny of risk at all levels in every business decision will help to protect the organisation's reputation – and further enhance its resilience in an uncertain world.

This is the first in a series of papers produced by PwC's Risk Practices team on risk and resilience. Our next paper will focus on establishing the case for organisational resilience, by examining the nature and drivers of resilience in the evolving risk landscape, and drilling down into the tools and approaches that may help organisations achieve it.

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