Risk Management
A Driver of Enterprise Value in the Emerging Environment

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In the aftermath of the global financial crisis, increasing pressure from corporate boards and senior leadership, investors, shareholders and regulators has elevated Enterprise Risk Management (ERM) to a ‘corporate imperative’ status. The consequences of failing to see through systemic issues and test the long term viabilities of corporate strategies is now well understood. Also exposed were the inadequacies of regulatory structures, which previously may have proliferated a box ticking mindset to risk management. Regulators have taken some steps at ensuring that an integrated risk assessment and a proactive approach to risk oversight are central to sustainable growth.

Influenced by growing regulatory and governance requirements, many organizations have formed Board-level risk committees to take a formal enterprise-wide role in risk assessment, mitigation and oversight. Board members and corporate leaders see the value of linking risk to strategy and using risk information to make improved, risk-informed, strategic business decisions. Developing, deploying and maintaining a practical, holistic risk management approach can help them lead through immediate, long-term, and evolving risks and succeed in the new business environment.

The survey provides both timely and useful insights on where the challenges lie and what are the steps that organizations have taken towards improving their risk management practices. To keep you informed, over the next 12 to 24 months, it would be our endeavor to engage with CEOs, Board Members and risk practitioners to share better practices and facilitate ongoing thought leadership on emerging practices.

We would like to thank all the respondents for taking the time to participate in this important initiative.
It would probably be fair to state that the global financial crisis has brought the discipline of Risk Management into the limelight. The regulatory framework for Risk Management and oversight has undergone a major overhaul in several countries. As organizations around the world are coming to grips with specific guidelines such as the Board’s oversight of Risk Management practices, linkage of executive compensation with risk, additional disclosures on Risk Management, etc., it is important to step back and ask the simple but pertinent questions about Risk Management:

- Are today’s Boards well equipped to deliver effective risk oversight?
- Where are organizations most challenged in linking risk to strategy?
- Is Risk Management considered as fundamental to the achievement of business objectives?
- Is Risk Management about realizing the upside or is it only about minimizing the downside that businesses could be exposed to?
- Will Risk Management continue to be equally important as ‘normalcy’ is restored in the developed markets?
- What is it that organizations need to do to embed risk thinking into decision making?

KPMG’s survey on Enterprise Risk Management - launched across Europe, Middle East, Africa and India is an attempt to get to the bottom of the above questions and figure out what organizations are doing to elevate risk oversight and management to a different level. In addition to providing a perspective on current trends and practices, this report also includes good practices that organizations are implementing which we hope would benefit the recipients of this report.
Respondent profile

Region

- India: 25%
- Middle East: 8%
- Europe: 57%
- Africa: 10%

Source: KPMG Risk Management Survey 2011

Profile

- CFO/Head of Finance: 26%
- Head of Risk: 18%
- CEO/Managing Director/Chairman: 17%
- Head of Internal Audit: 14%
- Executive Director: 5%
- Audit Committee Member/Independent Director: 2%
- Any other (e.g., Group President, Vice President, etc.): 18%

Source: KPMG Risk Management Survey 2011

Sector

- Financial Services: 12%
- Industrial Goods and Services: 8%
- Technology (Software and technology hardware): 7%
- Construction and Materials: 7%
- Insurance: 6%
- Health Care: 6%
- Banks: 5%
- Telecommunications: 4%
- Oil and Gas: 4%
- Chemicals: 4%
- Retail: 4%
- Food and Beverages: 3%
- Automobile and parts: 3%
- Utilities: 3%
- Basic resources (paper, metals and mining): 3%
- Conglomerate: 3%
- Real Estate: 2%
- Personal and Household Goods: 2%
- Media: 2%
- Travel and Leisure: 2%
- Others: 4%

Source: KPMG Risk Management Survey 2011
Executive summary

1. Risks emanating from uncertainties in the global market place and growing complexity in the value chain are cited by most as the important factors contributing to increased risks. However, doubts still linger about the extent of commitment and sponsorship for good Risk Management practices at the CEO and Board-levels. Consequently, nearly half of the respondents consider regulations as being important to drive Risk Management forward.

2. Both CEOs and Board members consider Risk Management to be equally important. CEOs/business leaders would like to see more focus on reputation risk, political risk and the impact of corporate restructuring and M & A on business performance. CEOs view Risk Management through an opportunity lens whereas others view it with a “keep us out of trouble” lens.

3. The gist of the regulatory developments across various countries in Europe, Middle East, Asia and Africa is that the Boards have been tasked with the onerous responsibility of ensuring alignment between strategy, risks, rewards and executive compensation. However clarity is lacking on how Boards are responding to these expectations. Only around a third of the respondents indicate that risk oversight is actually treated as a ”full Board” responsibility. Boards express the view that companies lack definitive processes to share risk information with them and there is less confidence in the Board’s ability to monitor adherence to the established appetite.
Nearly two thirds of the respondents in our survey indicated that their organizations developed risk responses at an individual-risk/process level rather than at a portfolio-level. This is partly fallout of the challenges that organizations are facing in risk aggregation/quantification at the organizational-level. Specifically, organizations have issues with ‘integration of risk, finance and business views’; ‘availability of data and data integrity’ and ‘utilization of appropriate tools to quantify and measure the impact of risks’. ‘Lack of adequate training on risk quantification/usage of quantification tools’ certainly adds to these challenges.

While attention is being given to improving existing Risk Management systems and processes, the softer and more fundamental issue of embedding risk into the organization’s culture and making it an integral part of the business is not getting the attention it deserves. Inadequate sponsorship at the top, inability to commit adequate resources and lack of adequate training in the use of Risk Management tools and techniques are proving to be impediments.

Organizations do not fully understand interdependencies between the various risks they face.

4

While embedding a strong risk culture is still in its infancy

5

Driven by regulatory requirements and demands from Boards, Audit and Risk Committees, a majority of respondents re-visit their risk profiles once a quarter. However, risk identification and assessment processes are not geared to provide an early indicator of likely risks or potential loss events that organizations could face in the future. Information sources are largely inward focused as compared to being forward looking and external focused. Detailed analysis of competitor strategies/benchmarking and scenario planning are not widely used. Over 80 percent of the organizations surveyed do not consider more than a three year horizon in their risk assessment and of these respondents, nearly 40 percent do not look beyond a year. Issues such as sustainability and climate change seldom feature in the risk assessments.

Current trends and practices indicate that there is still a long way to go in linking risks to strategy.

6

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7

Chief Risk Officers (CROs) need to become strategic business advisors

Non-financial companies are beginning to embrace the concept of appointing Chief Risk Officers. Two-third of the respondents believe that having a CRO will bring about a perceptible change to the quality of Risk Management practices prevalent in their organizations.

CROs have tended to focus on known risks and on the process and operational aspects of the business. Going forward, CROs are expected to validate the assumptions underlying strategy with benchmarking data, competitive trends and sector analysis and use this to advise the business on risk taking.
In the immediate aftermath of the global meltdown, two separate research projects sponsored by KPMG* and undertaken by the Economist revealed the following:

1. Fearful of both business failure and the penalties of non-compliance, many organizations have reacted by swelling their governance, Risk Management and compliance departments (GRC). This has led to a costly and complex web of often uncomplicated structures, policies, committees and reports creating duplication of effort. Worse still, GRC has lost sight of its prime objective; to improve efficiency and performance. In essence, the solution has become part of the problem.

2. Risk Managers are spending a disproportionate amount of their time on controls, compliance and monitoring activities although their real priorities lie elsewhere.

The above aptly summarize the key challenges confronting the discipline of Risk Management - it is yet to make the leap to a strategic level.

Over the past 18 months, a number of changes have been made to regulations particularly aimed at strengthening risk oversight processes at the Board-level across several countries. A brief illustrative snapshot of these changes across select countries such as the UK, South Africa, India and Nigeria is set out in the following table.

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* KPMG - EIU Report titled “The convergence challenge”, February 2010
The Board is responsible for determining the nature and extent of the significant risks it is willing to take in achieving its strategic objectives. The Board should maintain sound Risk Management and internal control systems.

The Board’s role is to provide entrepreneurial leadership of the company within a framework of prudent and effective controls which enables risk to be assessed and managed.

Non-Executive Directors (NEDs) should satisfy themselves on the integrity of financial information and that financial controls and systems of Risk Management are robust and defensible. They are also responsible for determining appropriate levels of remuneration of executive directors.

The Board should comment in the integrated report on the effectiveness of the system and process of Risk Management.

The Board’s responsibility for risk governance should be expressed in the Board charter.

The induction and ongoing training programs of the Board should incorporate risk governance.

The Board should review the implementation of the Risk Management plan at least once a year.

The Board should ensure that the implementation of the Risk Management plan is monitored continually.

The Board should set the levels of risk tolerance once a year.

The Board may set limits for the risk appetite.

The Board should monitor that risks taken are within the tolerance and appetite levels.

The Board to affirm and disclose in its report to members about critical Risk Management policy for the company.

Board of Directors report should include a statement indicating development and implementation of a Risk Management policy for the company including identification therein of elements of risk, if any, which in the opinion of the Board may threaten the existence of the company.

The Board should oversee the establishment of a management framework that defines the company’s risk policy, risk appetite and risk limits. The framework should be formally approved by the Board.

Ensure that the Risk Management framework is integrated into the day-to-day, operations of the business.

Undertake at least annually, a thorough risk assessment covering all aspects of the company’s business.

Obtain and review periodically relevant reports to ensure the ongoing effectiveness of the company’s Risk Management framework.

Ensure that the company’s Risk Management policies and practices are disclosed in the annual report.

50% of the respondents overall still believe that regulations will influence Risk Management positively. This view perhaps stems from the belief that stringent regulations are required to make the top management, viz., the CEO and the Board, more committed to effective Risk Management.

<table>
<thead>
<tr>
<th>UK (Revised Corporate Governance Code)</th>
<th>South Africa (King III)</th>
<th>India (Draft Companies Bill)</th>
<th>Nigeria (Guidelines on Risk Management)</th>
</tr>
</thead>
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<td></td>
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<tr>
<td></td>
<td>The Board should monitor that risks taken are within the tolerance and appetite levels.</td>
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</table>

Source: KPMG Risk Management Survey 2011
We interviewed a select group of independent directors to gather their views on the slew of new regulatory developments and what it means for Board oversight of risk. A majority agree that Boards need to play a more pro-active role in oversight of Risk Management, however there is also an apprehension that regulatory developments will result in an excessive focus on the processes of risk oversight with lesser attention been given to risk content and the quality of risk mitigation actions. When we queried independent directors on the areas where they are most challenged in providing effective risk oversight, they cited the lack of adequate involvement in strategy and the quality of risk information as being the most important challenges.

Both CEOs and Boards consider Risk Management to be equally important, however the two constituents see it in different ways:
The primary objective of recent regulatory changes is to ensure alignment between risks, rewards, performance and executive compensation. Regulatory changes have tasked Boards with the responsibility of ensuring that they are comfortable with the quantum of risks being taken in pursuit of organizational objectives. Boards are therefore expected to play a pro-active role in approving the risk appetite. Against this backdrop, it would not be surprising to see Boards today adopt a cautious “safety first” approach to risk oversight.

On the other hand, CEOs (as the table above indicates) are more forward looking and would like to leverage the discipline of Risk Management to improve organizational strategy and performance. CEOs view risk through an “opportunity” lens versus a more cautious “Risk Management” lens through which a Board member or a risk officer may view risk.

Some will view risk as a strategic business opportunity, others will view risk as risk – with an eye to putting on the brakes at the right time.

Mary Pat McCarthy
Executive Director
KPMG’s Audit Committee Institute

While recognizing the need to get the “process” right, more and more directors are expressing concern about getting bogged down in risk/compliance process and losing sight of the wood from the trees. The key to effective Risk Management therefore lies in bridging this gap between what the CEOs expect and what the directors, Audit Committee members and risk officers are actually doing.

Good compliance does not equate to effective Risk Management.

Eric Holt
Global Head,
Internal Audit, Risk and Compliance Services, KPMG LLP
Current trends and practices

Components of Effective Risk Management

- Risk Monitoring/Reporting
- Risk Identification/Assessment
- Risk Quantification/Mitigation

RISK GOVERNANCE

RISK CULTURE
Risk Governance

Risk management roles and responsibilities at the management level are well defined at respondent organizations. However, there seems to be some uncertainty regarding the accountability of risk oversight at the Board-level.

Regional Snapshot

- In India, a majority (64 percent) of the non-financial company respondents have indicated that the Risk Management roles and responsibilities have not been formalized.
- Only 20 percent of the Indian respondents have suggested that their company has formally articulated a risk appetite that is approved by the CEO and the Board covering all business units and functions.
- 45 percent of the European respondents indicate that executive management team members constitute the majority of the risk committee.
While respondent organizations have more or less formalized Risk Management roles and responsibilities, risk governance processes would require considerable attention if organizations are to leverage Risk Management as a driver of enterprise value.

### Board

- **Risk oversight not viewed as a “team activity”:** While respondents indicate they have formalized risk oversight responsibilities, a majority (64 percent) of the respondents do not believe that the full Board is accountable for risk oversight.

  - 36% The full Board
  - 33% The Risk Management Committee
  - 20% The Audit Committee
  - 11% Others

  ![see also case study on “Utilizing balanced scorecard to oversee risks” on page 23](image)

- **Boards are challenged in operationalizing risk appetite/policy:** The majority (62 percent) of the respondents are not entirely confident of the effectiveness of their Board’s practices to monitor/enforce management’s adherence with risk appetite/policies. Further, a respondents express reservations over seamless alignment of delegated authority limits, Risk Management responsibilities and risk appetite in their organizations.

- **Boards are unable to leverage risk information to improve strategy:** Only half of the respondents indicate that their companies have definitive processes to share information on Risk Management with the Board. Further, our conversations with several executive and independent directors indicate that the risk information received might be more at an operational level than at a strategic level. Not surprisingly, 66 percent of the respondents indicate that their Board is unable to leverage the risk information it receives to improve strategy.

  ![“Strategy is dealing with the ‘unknown unknowns’. Therefore Board and senior management team members must spend quality time analyzing various scenarios and potential risks these scenarios bring about.”](quote)

- **Head of Risk**
  Western European Utilities Company

  ![see also case study on “Linking risks to strategy through KRIs” on page 24](image)
Management

- Risk management framework is not consistently applied across subsidiaries: Only 29 percent respondents are in complete agreement that there is an unambiguous and standard application of Risk Management framework across all their company's subsidiaries.

- Risk management is not entirely integrated into management decision making: A significant proportion (42 percent) of the respondents are not satisfied with the quality of integration of Risk Management (strategic planning, project assessment, capital allocation, budgeting, etc.) into day-to-day management decision making.

- Chief Risk Officers (CRO)/Heads of Risk are not seen as enablers: There is general agreement that appointing a CRO has helped institutionalize Risk Management practices (two-third of the respondents believe that having a CRO will bring about a perceptible change to the quality of Risk Management practices prevalent in their organizations). However, amongst companies that do have a CRO, their role is still quite transactionary with a clear focus on operational and process level risks. To be more effective, CROs need to become strategic business advisors to the Board and the CEO by challenging and validating the risks and assumptions based on competitor benchmarking and industry analysis.

Has your organization appointed a Chief Risk Officer/Head of Risk and, in your opinion, has this appointment improved or is likely to improve Risk Management practices in your organization?

- Yes, we have already appointed a CRO and we believe it has improved the risk management processes in our organisation: 39%
- No, we do not believe that it has or will lead to any perceptible change in the quality of risk management practices: 30%
- No, we intend to appoint one in the next 12 months as we believe that it would positively influence risk management activities: 26%
- Yes, we have already appointed a CRO, but this has not significantly improved the risk management processes in our organisation: 5%

Source: KPMG Risk Management Survey 2011

Less than 25 percent respondents indicate that CRO has significant influence on strategic decisions such as investments in new markets, mergers and acquisitions, capital allocation and investments in new technology.
Risk Identification/Assessment

Top sources for gathering information on risks

While identifying risks, it is essential for companies to utilize a combination of sources that are internal and external, providing historical as well as forward-looking information. Survey analysis reveals that, typically, respondents rely more on internal sources than external sources such as analyst reports, market research results and competitor benchmarking.

Top 5 sources for identifying risks

- **75%** Industry trends
- **71%** Audit/Assurance reports
- **69%** Key risk indicators
- **64%** Whistle blowing process to report ethical breaches, fraud
- **59%** Risk workshop with employees

Assessment frequency and horizon

How frequently does your organization perform risk assessments?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual</td>
<td>27%</td>
</tr>
<tr>
<td>Half yearly</td>
<td>38%</td>
</tr>
<tr>
<td>Less frequent than annual/Adhoc</td>
<td>18%</td>
</tr>
<tr>
<td>Quarterly or more frequent</td>
<td>6%</td>
</tr>
<tr>
<td>No formal risk assessment</td>
<td>13%</td>
</tr>
</tbody>
</table>

Please indicate the time horizon covered by your risk assessments?

<table>
<thead>
<tr>
<th>Time Horizon</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 1 year</td>
<td>47%</td>
</tr>
<tr>
<td>Up to 3 years</td>
<td>37%</td>
</tr>
<tr>
<td>Up to 5 years</td>
<td>4%</td>
</tr>
<tr>
<td>Greater than 5 years</td>
<td>6%</td>
</tr>
</tbody>
</table>

Driven by regulatory requirements and demands from Board, Audit and Risk Committees, organizations have increased their frequencies of risk assessments and reviews. Despite this, 37 percent of the respondents do not consider more than a year’s look ahead in their risk assessment exercise and up to 84 percent of all respondents do not look beyond a three-year horizon in their risk assessments.

The above results clearly indicate that the risk identification and assessment exercise is somewhat inward focused and is not based on a robust analysis of the external context and long-term outlook for the business. This also explains to a large extent why organizations are struggling to stay abreast of emerging risks.

Maturity of risk assessment practices

Slightly less than one-fourth of the respondents utilize advance tools such as scenario planning or stress testing to identify and assess risks. Further, a majority (76 percent) of the respondents do not consider sustainability and climate change issues while identifying/assessing risks.

<table>
<thead>
<tr>
<th>Practices</th>
<th>Degree of Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Identification is linked to the organization’s specified financial objectives</td>
<td>![Degree of Implementation Icon]</td>
</tr>
<tr>
<td>Risk assessment involves a specific examination of the external environment in which the organization operates</td>
<td>![Degree of Implementation Icon]</td>
</tr>
<tr>
<td>Risk assessment takes into account the root causes of operational losses</td>
<td>![Degree of Implementation Icon]</td>
</tr>
<tr>
<td>Risk assessment involves performing scenario analysis, stress testing</td>
<td>![Degree of Implementation Icon]</td>
</tr>
<tr>
<td>Sustainability and climate change issues have been specifically considered in the risk identification exercise</td>
<td>![Degree of Implementation Icon]</td>
</tr>
</tbody>
</table>

Scale: 0-25% - ![Degree Icon] 26%-50% - ![Degree Icon] 51%-75% - ![Degree Icon] 76%-100% - ![Degree Icon]
The value of Risk Management increases once an integrated view can be presented, specifically understanding the relationships and dependencies of risks to each other. In isolation, a risk may not be seen as significant, but in combination with related risks it could be severe.

Head of Risk
African Insurance Company

Please indicate the three most important challenges in risk aggregation and quantification

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration of risk, finance and business views</td>
<td>61%</td>
</tr>
<tr>
<td>Data, data integrity and quality</td>
<td>60%</td>
</tr>
<tr>
<td>Lack of appropriate tools to measure and quantify the impact of risks</td>
<td>57%</td>
</tr>
</tbody>
</table>

Linked to the above is also the fact that 60 percent of the respondents have indicated that the risk responses are developed at an individual-risk level rather than at a portfolio-level by combining inter-related risks. Further, in determining their mitigation strategies/approaches there is a tendency to over-rely on process-level controls instead of considering broad range of mitigation measures that would include insurance, due diligence reviews, derivatives, etc.

Techniques/practices where respondent organizations’ expertise is good:
- Process risk reviews
- Controls embedded processes

Techniques/practices where respondent organizations’ expertise is average to poor:
- Due diligence reviews
- Project risk reviews

Techniques/practices where respondent organizations’ expertise is poor:
- Derivatives

Additionally, approximately 60 percent of the respondents do not utilize risk simulations for the business plans and budgets or stress test resilience of income statement/balance sheet.

How do you rate your organization’s understanding of interdependencies between various risks in current Risk Management activities?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>42%</td>
</tr>
<tr>
<td>Average</td>
<td>49%</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>9%</td>
</tr>
</tbody>
</table>

Source: KPMG Risk Management Survey 2011
Risk Monitoring/Reporting

Maintenance of risk registers

Maintaining risk registers is a crucial first step to tracking and monitoring Risk Management activities. Slightly over one-third of the respondents indicate that their organizations do not maintain risk registers that reflect objectives, risks, responses, key controls and monitoring status for all key risks and processes.

Utilization of risk reporting and monitoring software

A majority (63 percent) of the respondents indicate that they do not utilize a software solution for streamlining their risk monitoring and reporting activities. Respondents who do utilize such a software solution utilize it for a whole host of monitoring and reporting activities.

If your organization utilizes Risk Management software, what activities are performed through this software?

- Generating risk heat maps: 36%
- Monitoring early warning indicators: 48%
- Generating other reports for board and management: 54%
- Aggregating risk information (from internal and external sources): 54%
- Generating risk dashboards: 59%
- Obtaining the status of risk mitigation actions: 62%

Source: KPMG Risk Management Survey 2011

Maturity of risk reporting processes

While a majority of the respondent companies have definitive processes to report Risk Management information to the executive team, only half of the respondents have such process at the Board level, more specifically at the independent director level. This sentiment was also echoed by several independent directors in our conversations with them.

Some companies do not see the difference between issues and risks, and allow risks to become issues because they are not well monitored.

Head of Internal Audit
Western European Engineering Company

<table>
<thead>
<tr>
<th>Practices</th>
<th>Degree of Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring</td>
<td></td>
</tr>
<tr>
<td>Identified risks are compared to the organization’s current insurance portfolio</td>
<td>°</td>
</tr>
<tr>
<td>Responding to new and emerging threats with changes to risk policy</td>
<td>°</td>
</tr>
<tr>
<td>Reporting</td>
<td></td>
</tr>
<tr>
<td>The status of risks, losses and major control breaches are reported to the executive team</td>
<td>°</td>
</tr>
<tr>
<td>Report formats and dashboard content for Boards and Committees have been harmonized</td>
<td>°</td>
</tr>
<tr>
<td>There is an escalation system in place for emerging risks and reporting incidents</td>
<td>°</td>
</tr>
<tr>
<td>Communicating risk policies to employees and vendors</td>
<td>°</td>
</tr>
<tr>
<td>Sharing risk information with Non-executive Directors</td>
<td>°</td>
</tr>
<tr>
<td>Ensuring management receives consistent, timely and valid data</td>
<td>°</td>
</tr>
</tbody>
</table>

Source: KPMG Risk Management Survey 2011
Risk Culture

The survey also focused on the all encompassing but often underestimated area of risk culture. Constant and consistent communication about risk and ethics, consideration of risk factors into decision making and clearly defined roles and responsibilities with respect to Risk Management are some of the characteristics of a robust risk culture at the top.

Executive management is one of the key stakeholders for a Risk Management program and the tone at the top is a solid foundation for the success of the program.

Head of Internal Audit
African Conglomerate Company

In general, a challenge in most companies is to make people aware that it is ‘allowed’ to find issues within their own field and report it to the Risk Manager. This will bring more issues on the table and create an atmosphere where people dare to be frank and thereby avoid risks not being identified in time.

Risk & Insurance Manager
Western European Chemical Company

Influencers of Risk Culture

Does the organization consider risk management as important to achieving the enterprise objectives?

Risk culture

Tone at the top

Risk facilitation

Risk ownership

Is there a process for helping risk owners apply risk policies and tools in the way they make decisions?

Is there clarity about risk ownership, mitigating actions and appetite?

Source: KPMG Risk Management Survey 2011
The survey results clearly indicate that embedding a sound risk culture is still in its infancy.

<table>
<thead>
<tr>
<th>Component of Risk Culture</th>
<th>Results</th>
<th>Fully implemented (percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tone at the top</strong></td>
<td>- Management’s compliance with risk policies and the appetite is independently presented and reviewed by the Board</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>- Personnel reward structures are aligned to risk adjusted measures</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>- Organization has committed sufficient resources to Risk Management</td>
<td>47</td>
</tr>
<tr>
<td><strong>Risk ownership</strong></td>
<td>- Clarity on the risk appetite from senior management &amp; the Board</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>- ERM is integrated into management’s decision making processes</td>
<td>58</td>
</tr>
<tr>
<td><strong>Risk facilitation</strong></td>
<td>- CROs have a role to play in strategic decisions – M&amp;A, new products, entering new markets etc</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>- Risk management training covering the policy, methodology, tools and practices is rolled out</td>
<td>32</td>
</tr>
</tbody>
</table>

Source: KPMG Risk Management Survey 2011

see also case study "Undertaking a risk culture survey as a precursor to ERM implementation" on page 26
An analysis of Risk Management practices and trends at respondent companies reveals that these companies are facing certain common challenges and in order to overcome these challenges they have to focus on five key imperatives.

<table>
<thead>
<tr>
<th>Summary of pain-points</th>
<th>Key imperatives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Risk Governance</strong></td>
<td>Imperative 1: Enhance effectiveness of Board oversight of risks by separating risk process and content</td>
</tr>
<tr>
<td>Accountability for Board oversight of risk is blurred</td>
<td></td>
</tr>
<tr>
<td>Sharing of risk information with the Board lacks robustness</td>
<td></td>
</tr>
<tr>
<td>Risk management practices are not aligned to meet CEO expectations</td>
<td></td>
</tr>
<tr>
<td>The role of the CRO is mostly transactional</td>
<td></td>
</tr>
<tr>
<td><strong>Risk Identification Assessment</strong></td>
<td>Imperative 2: Integrate Risk Management into decision making by leveraging Key Risk Indicators</td>
</tr>
<tr>
<td>Risk identification is internal focused and short term oriented rather than a longer term perspective with robust consideration of the external context</td>
<td></td>
</tr>
<tr>
<td>Scenario planning, sustainability and climate change are rarely considered in risk assessments</td>
<td></td>
</tr>
<tr>
<td><strong>Risk Quantification/Mitigation</strong></td>
<td>Imperative 3: Focus on softer aspects such as risk leadership, risk perception &amp; behavior, and communication</td>
</tr>
<tr>
<td>Establishing the inter-linkages between risks poses challenges</td>
<td></td>
</tr>
<tr>
<td>Majority do not pursue a portfolio approach to risk mitigation</td>
<td></td>
</tr>
<tr>
<td>Organizations lack expertise in risk mitigation approaches other than process level controls</td>
<td></td>
</tr>
<tr>
<td><strong>Risk Monitoring/Reporting</strong></td>
<td>Imperative 4: Position the role of a CRO as a strategic business advisor</td>
</tr>
<tr>
<td>Risk heat maps and information dashboards are not fully aligned to strategic priorities</td>
<td></td>
</tr>
<tr>
<td>Technology and tools are not adequately leveraged in risk monitoring and reporting.</td>
<td></td>
</tr>
<tr>
<td><strong>Risk Culture</strong></td>
<td>Imperative 5: Integrate the company’s Risk Management efforts at an enterprise-level</td>
</tr>
<tr>
<td>Risk is practiced in silos and companies still view it with a compliance mindset</td>
<td></td>
</tr>
<tr>
<td>Risk owners are unclear about the organization’s risk appetite</td>
<td></td>
</tr>
<tr>
<td>Risk responsibilities, delegated authority limits and compensation structures are not seamlessly integrated with risk appetite/tolerance</td>
<td></td>
</tr>
</tbody>
</table>
Imperative 1: Enhancing board governance of risk

Effective risk oversight by the Board entails:

1. Higher degree of involvement in strategy
2. Addressing the information challenges
3. Ensuring right level of expertise within Board and its committees

1. Higher degree of involvement in strategy

Boards need to understand the assumptions underlying strategy and challenge these assumptions through “what if” scenarios. Some of the questions Board could ask include:

- How does our cost structure, market share and product profile compare with competitors?
- What is the uniqueness of our business model and how long will it sustain?
- Do we know what our customers want?
- What are new products and capabilities that our competitors are focusing on and what is our response?
- What is our ability to absorb shocks and to what extent?

Understanding the implications of and evaluating the strategic alternatives requires a rigorous conversation about risk with the people who are knowledgeable about the risks facing the company. It is important to have conversations about risk with the CEO, CFO, chief risk officer (CRO), general counsel, auditors, and business unit leaders responsible for managing the risks and perhaps the business leaders responsible for IT and human resources as well. It is also essential to get input from third parties to test and validate management’s core risk assumptions and perceptions.
2. Addressing the information challenge

Boards cannot rely on intuition alone in their oversight of risks. In order to have the desired level of clarity on strategy and the risks inherent in the strategy, Boards need to invest time in defining their information needs.

The information needs of Boards are dynamic and sometimes there is lack of consensus on information requirements and their formats. One way to overcome this situation is to work with management to identify the essential KPIs; the real value drivers of the business. These are measures of business processes and outcomes, both financial and non-financial. They comprise both lead and lag indicators.

3. Ensuring that there is the right level of expertise within the Board and its Committees for effective risk oversight

Risk oversight is a team activity. While the ultimate accountability for risk oversight should rest with the Board, the Board should determine how it will engage with the risk owners and senior management on key risk areas.

Case Study

Utilizing the Balanced Scorecard to oversee risks

A global fast moving consumer goods company has successfully used the Balanced Scorecard method as a way to identify the right risks and monitor performance in the context of the changing risk profile of the organization.

In order to increase sales, cut costs, increase margins, market share, etc. organizations should engage in activities, processes, programs and projects. Directors must get behind the financials to understand the true value drivers and how the organization is performing against them.

This company identified these value drivers based on:

Financial – How do our shareholders see financial performance and how does it look when benchmarked to competition?

Customers – How do customers see us and our products/services?

Internal – What must we excel at? Are we developing the right capabilities to deliver?

Innovation and Learning – Can we continue to improve?

Stakeholders – How are we perceived by the communities impacted by our business?

Further, the organization utilized Balanced Scorecard to align performance measures to company strategies by:

1. Identifying critical success factors for each strategy and the business initiatives required to exploit those success factors (what must we do to make the strategies work?)

2. Formulate KPIs for each success factor (How do we know whether or not the business initiatives are working?)

3. Ensure that all business perspectives are included in these KPIs (Are we overlooking important value drivers?)

Risk Process

- Organization structure for managing risk
- Developing a holistic view of risks
- Helping business view risk with a consistent approach

Risk Content

- Ownership
- Monitoring the quality of mitigating actions
- Re-aligning strategy to risk profile

Boards should ensure separation of risk process and risk content for effective oversight:

<table>
<thead>
<tr>
<th>Board</th>
<th>Oversight/Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board committees</td>
<td>Oversight of risk content in specific areas</td>
</tr>
<tr>
<td>Risk functions</td>
<td>Identification, assessment, training, tools</td>
</tr>
<tr>
<td>Risk owners</td>
<td>Identification, assessment, monitoring/mitigation and reporting</td>
</tr>
</tbody>
</table>

Organizations are waking up to the fact that they need to focus on both the process and content equally. Since centralization of risk content responsibility is not possible, Boards tend to focus on the risk process. More specifically, Boards are waking up to the fact that risk content for their organization is quite varied and requires a number of different skill sets.

A proliferation of risk committees may be feasible in really large and complex organizations but may not help in smaller organizations. Having multiple committees deal with a myriad of risks may help only if the committees work together and reach a consensus on important risks which is often difficult to achieve in practice. Possibly, one Risk Management committee with two to four specialist expert members from within the company who are called in for each of their areas of expertise may go a long way towards making risk oversight simpler and sustainable.
Imperative 2: Linking risks to strategy through KRI's

Case Study

Linking objectives, strategy and risks to Key Risk Indicators

A large diversified infrastructure company with interests in steel, power and ports has a well established Risk Management team which works with the business to realign their power business strategy based on emerging macro-economic and industry trends. This is done by developing effective Key Risk Indicators (KRI) that provide insights about potential risks/loss events that may have an impact on the achievement of the organization's strategic objectives.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Strategic Initiative</th>
<th>Potential Risks</th>
<th>Key Risk Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profitable growth through Increased capacity</td>
<td>Engaging in profitable business models like sale of merchant power</td>
<td>Reducing power deficit scenario to exert downward pressure on merchant power prices</td>
<td>Demand Supply gap</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improvement in transmission infrastructure will result in spare capacities for merchant power</td>
<td>Transmission capacities in states</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exposure to Imported coal supply will lead to cost escalation, thereby affecting the profitability</td>
<td>Coal prices</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Key national events like elections, monsoons, etc. in India will impact merchant power prices</td>
<td>Election calendar Monsoon forecasts</td>
</tr>
</tbody>
</table>

The risk team develops KRI's by analyzing a risk event that has affected the organization and/or industry players in the past (or present) and then working backwards to pinpoint intermediate and root cause events that led to the ultimate loss or lost opportunity. The goal is to develop key risk indicators that provide valuable leading indications that risks would occur. The closer the KRI is to the ultimate root cause of the risk event, the more likely the KRI will provide management time to proactively take action to respond to the risk event. This process is depicted visually below.
Leading Indicators of Risk Event

In the adjoining figure, a certain passage of time proceeds from a root cause event to (potentially) an intermediate event which if not acted upon will ultimately lead to the risk event. In developing a KRI to serve as a leading indicator for future occurrences of a particular risk, the risk team needs to think through the chain of events that would lead to the loss so that management can uncover the ultimate driver (i.e., root cause(s)) of the risk event.

When KRIs for root cause events and intermediate events are monitored, the management is in a position to identify early mitigation strategies that can begin to reduce or eliminate the impact associated with an emerging risk event. It will also help the management re-align its strategic objectives to match the changing external context.

KRIs Provide Opportunities for Proactive Strategic Risk Management

As time elapses, the range of uncertainty begins to increase or decrease thereby impacting the successful execution of strategic objectives.

Based on its risk appetite, the management pre-determines certain levels or thresholds for each KRI that will trigger actions to adjust their strategies proactively. Once strategies are revised, new KRI trigger points are established with action plans pinpointed in advance.

<table>
<thead>
<tr>
<th>YEAR 2011</th>
<th>Initial Strategy</th>
<th>Demand Supply gap</th>
<th>Import Coal Prices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Capacity to be sold on a merchant basis</td>
<td>Q1 2011 &gt; 25%</td>
<td>Q1 2011 &gt; INR 3500/tonne</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q3 2011 &gt; 20%</td>
<td>Q3 2011 &gt; INR 3800/tonne</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 2012</th>
<th>Revise Strategy</th>
<th>Demand Supply gap</th>
<th>Import Coal Prices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enter into short term PPAs</td>
<td>Q1 2012 &gt; 10%</td>
<td>Q3 2012 &gt; INR 3400/tonne</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 2013</th>
<th>Revise Strategy</th>
<th>Demand Supply gap</th>
<th>Import Coal Prices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enter into long term PPAs</td>
<td>Q3 2013 &gt; INR 3500/tonne</td>
<td>Q3 2013 &gt; INR 3800/tonne</td>
</tr>
<tr>
<td></td>
<td>Enter into FSA's</td>
<td>Delayed by 3 years</td>
<td></td>
</tr>
</tbody>
</table>

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Imperative 3: Instilling a robust risk culture

In most cases, organizations get their strategy wrong because of a conflict between organizational and individual decision makers’ perception and appetite for risks. Hence, it is important to address these alignment issues as a first step towards implementing Enterprise-Wide Risk Management (ERM).

What is the importance of the risk culture survey?

1. Before undertaking a Risk Management journey, it is important to assess the current level of understanding of the organization’s objectives, its understanding of risk concepts and the attitude towards risk taking.

2. This is especially important because a force-fitted and poorly integrated ERM effort will only lead to Risk Management existing on paper and not in spirit or in practice. We should remember that pretty much all banks which went bankrupt or got themselves in trouble had their ERM status as green.

3. Understanding the organization’s attitude towards risk, their compensation philosophy, ability of the leaders to discuss difficult issues before it hits them, etc. will allow the organization to dynamically respond to risks as they emerge on a continuous basis. This is far more beneficial than an approach where risk is the responsibility of the CRO and one that is addressed through a once a year discrete risk assessment exercise.

Three key focus areas of the risk culture survey:

1. Part 1 – Understand CXO and senior management perceptions about risks and the way they are/should be managed?

2. Part 2 – Figure the organization’s pressure points in implementing Risk Management including understanding the pressure points from an implementation perspective. The pressure points included aspects such as clarity on business intelligence and information, understanding of the risk appetite, ability to communicate difficult issues freely and having clarity around roles and responsibilities.

3. Part 3 – Establishing the expectations of the CEO from the risk function – what role should it be playing in the organization?

Outcomes of the risk culture survey:

1. The risk culture survey helped the organization realize that while there was a good understanding of objectives and strategies and an ability to address difficult issues openly, there was an ambiguity on what really the risk appetite was. It also revealed that while a large part of the organization was aware of the initiatives around risk, a part of the organization had no awareness or opinion on their current maturity level.

2. The organization could therefore tailor its approach to engage the various CEOs on defining a business specific risk appetite. The risk function was also roped in to undertake targeted trainings of business personnel so that they could appreciate what risks meant in day to day business and how they could participate or respond.

Case Study

Undertaking a risk culture survey as a precursor to ERM implementation

In the course of implementing ERM, a large global infrastructure company with interests in Airports and Highways, was committed to addressing some of the conflicts in perceptions and appetites that frequently leads to failed ERM initiatives.

The organization began its journey towards implementing ERM by first focusing on whether it is ready to embrace ERM as part its operations. Accordingly, the organization conceptualized a risk survey and administered it to a set of key stakeholders encompassing the Head of Strategy, CXOs, Heads of Business units and Functions across businesses.
Imperative 4:
Position the CRO as a strategic business advisor

In the absence of a senior executive charged with Risk Management responsibilities, Risk Management tends to exist in silos with Functional Heads and Business Unit Heads creating their own policies and procedures with a myopic view of risks affecting their functions/business units. On the other hand, a CRO would be empowered to establish a common approach and enforce the discipline that allows aggregation, prioritization, quantification, analysis, and reporting of risk at the enterprise level.

Typically, organizations find that appointing a Chief Risk Officer or Head of Risk delivers immediate and long-term benefits across five critical areas of Risk Management.

<table>
<thead>
<tr>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>▶ A CRO, from his vantage point, could provide an integrated/organizational view of the risks impacting the company, especially strategic risks and create heightened awareness of risks at the senior management/Board level.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expertise</th>
</tr>
</thead>
<tbody>
<tr>
<td>▶ A CRO has necessary skills and leadership to serve as a dedicated risk champion who understands Risk Management, risk appetite, and risk governance.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Objectivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>▶ As the CRO is independent of the business, he/she would be able to provide an unbiased view of risks, coordinating conflicting and competing views</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Integration and Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>▶ A CRO enables the organization to increase its agility by synthesizing risks, integrating them into one risk environment, and communicating them to leadership and the Board.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>▶ A CRO could help the organization sustain its Risk Management efforts/initiatives and ensure that Risk Management framework matures or grows with the organization</td>
</tr>
</tbody>
</table>
What are the ideal skillsets/experiences required of a CRO?

- A good understanding of the company’s industry/business
- A sound understanding of ERM principles and techniques
- Excellent project management skills
- Advanced facilitation skills-guide and direct discussions and gain agreement among a variety of business constituencies
- An ability to network with employees across the entire spectrum of the organization
- A good familiarity with strategy, governance, compliance and performance dynamics
- Competent in communicating with directors, management and employees of all levels.

How can CRO’s ‘maximize enterprise value’?

- Focus on key strategic and reputational risks
- Track risks emanating from change management and people initiatives
- Work with management to solve risk-related challenges
- Incorporate risk in program management
- Rely on real data while arriving at risk assessments than on perspectives and perceptions
- Build a Risk Management dashboard for Board and senior management
- Advance fundamental conversations with leadership and the Board regarding effective Risk Management, specifically by seeking answers to five key questions:
  - Does our existing risk profile accurately capture our risks so we can avoid surprises?
  - Do we have the latest tools, techniques, and processes in place to identify and manage our risk exposure?
  - Have we assessed our Risk Management “culture” to determine whether it is enhancing or detracting from effective Risk Management?
  - How well are our risk-monitoring functions working? Are they operating in tandem or in silos
  - Are we getting value out of our Risk Management and monitoring programs and if so, how are we measuring that value

However, in order to realize the true benefit of appointing a CRO, organizations have to:

1. Ensure that their CRO has a good mix of industry/business and Risk Management experiences
2. Transition the role of a CRO from ‘conserving enterprise value’ to ‘maximizing enterprise value’
Case Study

CRO helping risk function add value by bringing in the “outside in” perspective

The CRO of a large power producing company put together a comprehensive loss events database based on risk events that had happened within the company and also within industry peers both nationally and internationally. The objective of this exercise was to put together a comprehensive database of all potential threats that could undermine the organization achieving its stated objectives in specific areas.

As the company was in the business of putting up a thermal coal based power plant, coal linkages and BTG (Boiler, Turbine and Generator) equipments were identified as some of the critical risk categories. Based on the loss events database, the CRO and his team put together a very detailed questionnaire which was then used as a basis to prioritize the key risks within each of the broad risk categories.

Example questionnaire relating to coal linkages

<table>
<thead>
<tr>
<th>Area</th>
<th>Related questions (Illustrative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability</td>
<td>▶ In 2011-12, there is a shortfall in indigenous coal availability to the extent of 75 Million tones and this could rise to 150 MT in 2012-13. How will this impact the company?</td>
</tr>
<tr>
<td>Quality</td>
<td>▶ How would the quality of imported coal impact Plant Load Factors (PLFs) and cost of generation? How do we plan to manage this risk?</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>▶ Coal deposits are usually a long way from centers of consumption and with no integrated network, the cost of transporting coal to power plants is high – how do we plan to manage transportation issues and cost of transportation?</td>
</tr>
<tr>
<td>Clearances</td>
<td>▶ Are we expecting land acquisition issues prior to commencement of mining?</td>
</tr>
<tr>
<td></td>
<td>▶ Out of the 200 coal blocks allocated to date, commercial production has started in only about 20 blocks to date – primarily due to long stretched project clearances (obtaining regulatory approval is a lengthy process) – how will this impact projects?</td>
</tr>
<tr>
<td>Coal allocation</td>
<td>▶ Development of captive &amp; linked mines to new projects is not keeping pace with power projects – it takes at least about five to seven years to commence production of coal after the mine is allocated – how do we propose to manage this risk?</td>
</tr>
<tr>
<td>Imported coal issues</td>
<td>▶ The landed cost of imported coal is 2.5 times that of domestic coal – how will this impact profits?</td>
</tr>
<tr>
<td></td>
<td>▶ There are large investments made upfront to acquire coal blocks – how do we expect to achieve the desired ROI?</td>
</tr>
</tbody>
</table>

Similarly, the CRO with the help of external consultants commissioned a detailed study on instances of BTG failures and the underlying root causes. This was done with the objective of learning from past errors and ensuring that the PLF can be maximized and equipment failures can be minimized.

Temperature conditions prevailing at the plant location and the moisture content within the imported coal were collectively analyzed to arrive at the BTG specifications that would lead to optimum PLF and avoid the situations that could potentially cause equipment failures.
Imperative 5: Integrating risk management at the enterprise level

Case Study

Developing a single view of risk by integrating governance, risk and compliance

**Strategy deployment and business plan validation:**

Based on strategic drivers at a group level, a global energy company finalizes capital expenditure plans and asset plans. The objective of this exercise is largely to determine the resource allocation amongst conflicting business and regional requirements. The capital and asset plans are finalized at a group and business level and then cascaded to regional and operating levels. Accordingly, the unit level and asset level business plans are prepared and these are presented and consolidated at the Regional, Business and Group levels.

The BAC’s risk assessment is both forward and backward looking as the picture above depicts. The internal audit plan is a sub-set of the risk profile developed by the BAC. The organization develops a comprehensive Business Assurance plan which links key organizational risks to the assurance providers. For example, Value Assurance Reviews (VARs) are required to monitor whether key strategic projects (above USD 100 million) are delivering the intended benefits. The VARs are undertaken by qualified technical specialists.

**Risk Aggregation and Management:**

At the organizational level, the Business Assurance Committee (BAC) is responsible for consistently aggregating risks across different levels. Risks flowing from key strategic initiatives are identified at the Group and Business levels. However, based on a clearly cascaded risk thresholds (that are based on Group risk and materiality thresholds), risk assessments are also undertaken at a Regional and Country levels. The Country level risks are consolidated at a Regional Level and the Regional risks are consolidated at a Business Level by the respective BACs.
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