

A FRAMEWORK FOR BOARD OVERSIGHT OF ENTERPRISE RISK



TABLE OF CONTENTS

I	INTRODUCTION.....	3
II	CRITICAL ISSUES.....	4
III	INTRODUCTION TO A BOARD RISK OVERSIGHT FRAMEWORK.....	9
IV	BOARD RISK OVERSIGHT FRAMEWORK.....	10
V	BOARD OVERSIGHT OF RISK – ESTABLISHING CONTEXT.....	11
VI	BOARD OVERSIGHT OF RISK – STRATEGIC RISK.....	14
VII	BOARD OVERSIGHT OF RISK – STRATEGIC RISK IN MERGERS AND ACQUISITIONS.....	21
VIII	BOARD OVERSIGHT OF RISK – FINANCIAL RISK.....	25
IX	BOARD OVERSIGHT OF RISK – ORGANIZATIONAL RISK.....	28
X	BOARD OVERSIGHT OF RISK – OPERATIONAL RISK.....	31
XI	BOARD OVERSIGHT OF RISK – EXTERNAL RISK.....	33
XII	BOARD OVERSIGHT OF RISK – INITIAL CONSEQUENTIAL ANALYSIS.....	35
XIII	BOARD OVERSIGHT OF RISK – INTERCONNECTIVITY OF RISKS.....	37
XIV	BOARD OVERSIGHT OF RISK – CONSEQUENTIAL RE-ANALYSIS.....	39
XV	BOARD OVERSIGHT OF RISK – PRIORITIZATION.....	40
XVI	BOARD OVERSIGHT OF RISK – RISK TOLERANCE ASSESSMENT.....	41
XVII	BOARD OVERSIGHT OF RISK – RESPONSE STRATEGY.....	42
XVIII	BOARD OVERSIGHT OF RISK – MONITORING.....	45
XIX	BOARD OVERSIGHT OF RISK – FINAL THOUGHTS.....	47
XX	BOARD OVERSIGHT OF ENTERPRISE RISK-APPENDIX I.....	48

I INTRODUCTION

The issue of board oversight of enterprise risk was a topical subject for board deliberation in 2008, and the fall-out from the financial crisis and related global recession has brought the subject even further to the forefront. The re-examination of the role of the board of directors in the oversight of enterprise-wide risk has not been limited to investors or boards asking themselves what could have been done to better understand and proactively address exposures related to the recent financial crisis; regulatory bodies such as the SEC and New York Stock Exchange have introduced or are in the process of introducing new rules on governance and disclosure related to enterprise risk. For many boards, however, oversight of risk is a high priority, but is, to a greater or lesser degree, uncharted territory.

What exactly is the appropriate role of the board in corporate risk management? According to McKinsey, traditional governance models support the notion that boards cannot and should not be involved in day-to-day risk management, but that directors should, through their risk oversight role, be able to satisfy themselves that effective risk management processes are in place and implemented. The risk management system should allow management to bring to the board's attention the company's most material risks and assist the board in understanding and evaluating how these risks interrelate, how they may affect the company, and how these risks are being addressed by management. Directors need to have the experience, training and knowledge of the business to make a meaningful assessment of those risks. However, over-reliance on enterprise risk processes and models can lead to unexpected and at times catastrophic consequences. In certain cases, boards must take a more active role in risk assessment, such as risks associated with leadership since management cannot always be expected to objectively assess itself from a risk perspective. Unlike other embedded responsibilities of boards and committees such as the oversight of financial reporting and disclosure, there are no standards for the oversight of risk and few, if any, authoritative sources upon which boards may rely.

The Canadian Institute of Chartered Accountants (CICA) wishes to extend its role in providing thought leadership to boards of directors in the area of risk oversight. To enhance understanding of the issues, board needs, and in order to determine an appropriate mandate, the CICA plans to elicit the views of experienced directors through the use of small forums. The forums will help the CICA determine an appropriate content and process for a risk oversight framework and the most effective delivery methods to provide the information to directors.

Forum participants will be asked to provide input relating to three broad areas:

- ◆ the critical issues boards of directors face in their role as overseers of enterprise risk;
- ◆ the usefulness of a risk oversight framework in assisting boards to carry out their oversight role, and what that framework would involve; and
- ◆ practical approaches and toolsets and whether they would be helpful to boards.

The intent is not to produce an enterprise risk management framework or a technical risk process, as these are more suitable for management. Rather, the final product is to develop a risk oversight framework for boards of directors and, if considered necessary, practical approaches and toolsets.

II CRITICAL ISSUES

To stimulate discussion at the forums of the current issues and limitations, set out below is a non-exhaustive list of perceived board concerns.

OVERSIGHT

In the context of risk oversight, what is the role of the board? The Joint Committee on Corporate Governance (the Saucier Committee) defined the role this way:

“Boards’ involvement in strategic planning and the monitoring of risks must recognize directors are not there to manage the business, but are responsible for overseeing management and holding it to account. Where the lines are clear, and roles are respected, effective boards will contribute to the development of strategic direction and approve a strategic plan. They will oversee the processes that management has in place to identify business opportunities and risks. They will consider the extent and types of risk that it is acceptable for the company to bear. They will monitor management’s systems and processes for managing the broad range of business risk. And most important, on an ongoing basis, they will review with management how the strategic environment is changing, what key business risks and opportunities are appearing, how they are being managed and what, if any, modifications in strategic direction should be adopted.”

This definition implies that the oversight role is somewhat passive in nature, encompassing a significant reliance on management. But are there not valid circumstances in which boards must take a leadership role in assessing risk? For instance, a primary risk might be an ill-advised strategy or a failure to execute strategy. How does management critically evaluate the very strategy it developed or objectively assess its ability to execute? Similarly, the quality and effectiveness of a corporation’s leadership, including the chief executive officer, can pose a major risk. How is it possible for management to assess itself?

Do boards have clarity of understanding about their oversight mandate and role?

Are boards sufficiently active in fulfilling this part of their mandate?

Do boards have a common, practical understanding of their responsibility for risk oversight? Is this view the same as that of the CEO and executive team?

Do boards confuse their responsibility for risk oversight with risk disclosure?

CRITICAL ISSUES

DIRECTORS' INDIVIDUAL KNOWLEDGE AND UNDERSTANDING OF RISK

If asked whether they understood business risk, most corporate directors would answer in the affirmative. Yet time after time, corporations find themselves in distressed situations and even bankruptcy. The question that invariably is asked is “Where were the directors?”

Do board members have an adequate, up-to-date appreciation of the nature, types and sources of risks faced by their organizations?

Do they how truly understand the interdependencies and how events or conditions that happen simultaneously can spell disaster?

Are seemingly unthinkable business risks ignored because of their perceived unlikelihood of occurring?

Do boards have the necessary blend of business and industry knowledge and experience to assess risk?

DETERMINING A CORPORATION'S APPETITE FOR RISK

Whether advertently or inadvertently, every corporation constantly faces risk. In fact, an on-going management responsibility is evaluating and adequately balancing risk with reward.

On a periodic basis, do boards consider and quantify the corporation's capability to take on and absorb risk?

Do boards consciously assess risk and reward when considering major initiatives?

Do boards have a framework within which to make meaningful judgments around risk tolerance?

CRITICAL ISSUES

BOARD ORGANIZATION AND STRUCTURE FOR ADDRESSING RISK

There are various models of board organization currently used to for the oversight of risk. Risk assessment is often delegated to one or more board committees. In other cases, the board as a whole takes on this responsibility. There are also instances when boards simply fail to assign this responsibility.

Is the assignment of risk oversight clearly mandated?

If delegated to one or more committees, does the committee have the capability to oversee risk in its broadest form?

Is sufficient time set aside to carry out this responsibility?

Do board agendas promote integration of risk issues with other agenda items such as strategy and finance?

MANAGEMENT APPROACH TO ENTERPRISE RISK

Management approach to risk can range from a highly structured enterprise risk management process with dedicated organizational resources to an unsophisticated and passive approach often displayed as an afterthought, usually around major expenditures or in a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis.

Does management have a robust framework and comprehensive process to assess risk?

Do boards too readily accept management's assessment of risk even if it appears superficial?

Are risk management processes or systems well designed such that risk is managed holistically, rather than in silos?

Do corporations have adequate systems and processes in place to monitor the effectiveness of risk management?

Do boards and management learn from and act on instances where risk management strategies and systems have been ineffective?

Can management adequately and objectively assess risk when it is the architect?

Is the risk appetite inherent in the company's strategic plan appropriate?

CRITICAL ISSUES

INTERRELATIONSHIPS OF RISKS

Company failures, much like air disasters, usually are the result of many factors occurring simultaneously. Through a backward-facing lens, the origins of these unfortunate and often disastrous events are painfully apparent.

Does management understand the interconnectivity and interdependencies of risks?

Are risk interrelationships ignored because the likelihood of occurrence is deemed remote?

Do boards have an adequate framework to understand the interrelationships and interdependencies of risks?

STRATEGIC RISK

Strategic plans are developed to map future direction, delineate the basis of a corporation's competitive advantage and set out specific plans to achieve financial and other objectives. Since strategy ultimately involves choices, risks are inherent in any strategic plan.

Do boards understand and discuss the linkages between strategy and risk?

Do boards assess strategic plans from the point of view of failure and the attendant consequences?

Do boards integrate assessment of risk and choices about risk into strategic plans?

Do boards have a framework and toolset such as competitive analysis and scenario planning to assist them in understanding strategic risk?

CRITICAL ISSUES

ADEQUACY AND TIMELINESS OF RELEVANT INFORMATION

Typically, boards of directors and board committees receive substantial information on quarterly performance, annual and longer-term plans, together with committee-specific information.

Other than risk-related supplements to strategic plans and information related to financial reporting risk, do boards receive comprehensive reports on risk?

Is the information provided sufficient to make reasonable, supportable judgments about risk and risk management?

EXTERNAL ADVICE

Typically, boards of directors have access to expert advice related to areas such as legal, accounting, compensation, financing, and mergers and acquisitions.

Are there reputable experts to advise boards on various risk matters?

Do boards regularly engage such experts?

EXECUTIVE PERFORMANCE EVALUATION AND COMPENSATION

Executives are evaluated by boards using a variety of metrics and other criteria, and compensation philosophy and the criteria on which evaluations are based are typically designed to align the executives with the goals of the corporation.

Do boards include risk management as part of the criteria for executive evaluation?

Are current compensation practices aligned or at odds with prudent risk management?

III INTRODUCTION TO A BOARD RISK OVERSIGHT FRAMEWORK

A common concern among boards of directors is the lack of a comprehensive framework and toolsets to assist boards in structuring an effective and robust enterprise risk oversight process. This document puts forward a defined framework and systematic approach that incorporates many elements of an enterprise risk management process but is specifically tailored to the board's oversight role. Before reviewing this framework, it might be helpful to contrast enterprise risk from a management perspective versus the board's oversight role.

ENTERPRISE RISK MANAGEMENT

Enterprise risk management (ERM) in business includes the methods and processes used by organizations to manage risks related to the achievement of their objectives. ERM provides a framework for risk management, typically involving the identification of particular events or circumstances relevant to the organization's objectives, assessment of the likelihood and magnitude of impact, determination of a response or mitigation strategy, and monitoring progress. By identifying and proactively addressing risks, companies protect and create value for their stakeholders, including owners, employees, customers, regulators, and society overall. ERM may also be described as a risk-based approach to managing an enterprise; integrating concepts of strategic planning, operations management, and internal control. ERM is evolving to address the needs of various stakeholders, who want to understand the broad spectrum of risks facing complex organizations to ensure that they are appropriately managed.

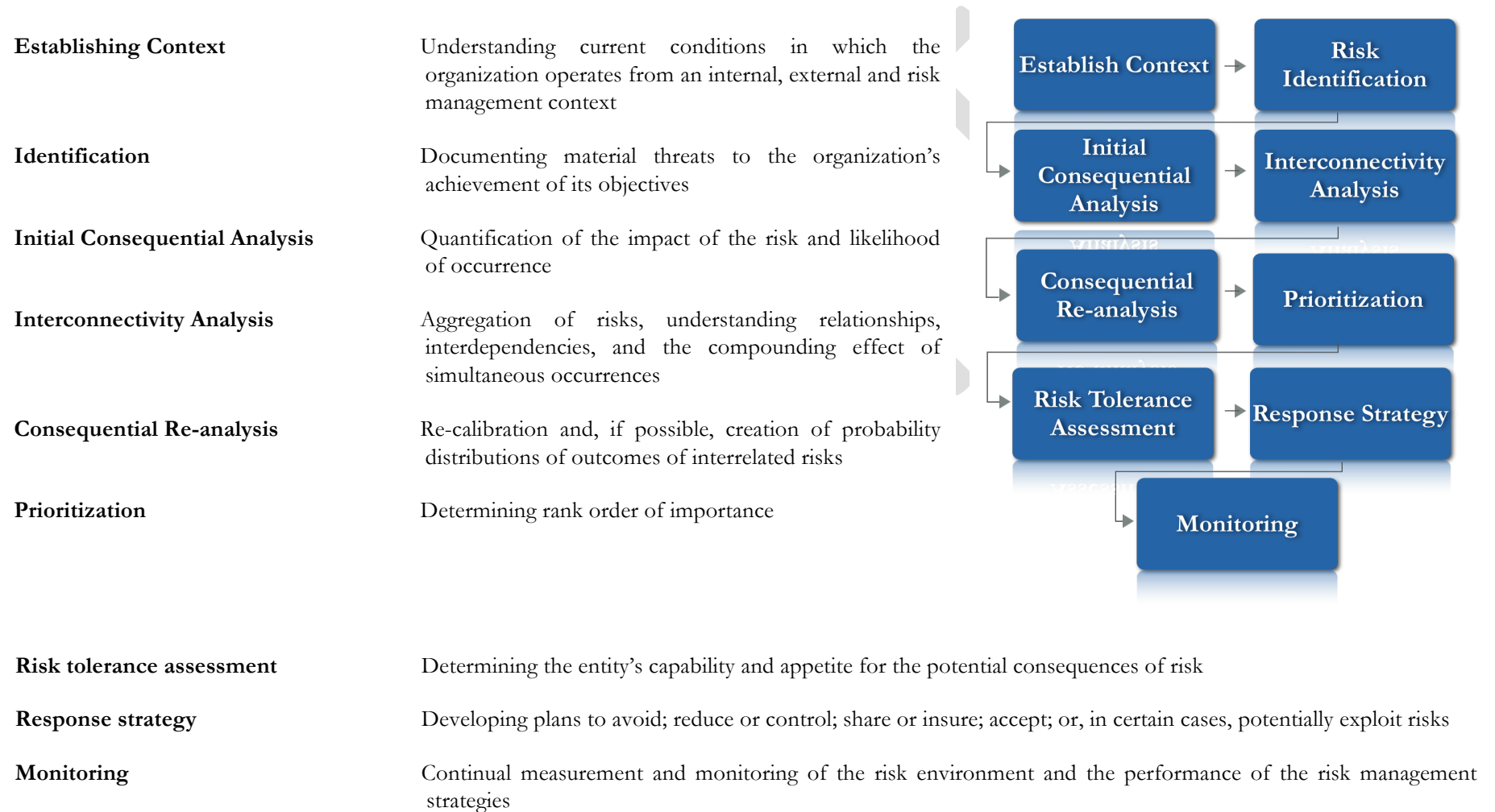
BOARD OVERSIGHT OF RISK

The board's role in the oversight of risk is similar in some ways to the role of the audit committee. The audit committee does not prepare financial statements, draft disclosures nor maintain the system of internal control. Rather, the audit committee bears the responsibility of overseeing the financial reporting and control processes. Similarly, boards of directors are not expected to unilaterally identify, analyze, mitigate and monitor enterprise risk. Rather, boards must oversee the risk management systems and processes as well as continuously review the outcomes and planning associated with such processes. As stated earlier in this document (and worthy of repetition), the oversight role should not be passive in nature nor become too reliant on management.

Underpinning successful board risk oversight processes requires board confidence in management, access to relevant and reliable information and function effective functioning of a board overall.

There are valid circumstances in which boards must take a leadership role in assessing risk. For instance, a primary risk might be the in ill-advised strategy or a failure to execute strategy. How does management critically evaluate the very strategy it developed or objectively assess its ability to execute? Similarly, the quality and effectiveness of a corporation's leadership including the chief executive officer can pose a major risk. Is it fair or even possible for management to assess itself?

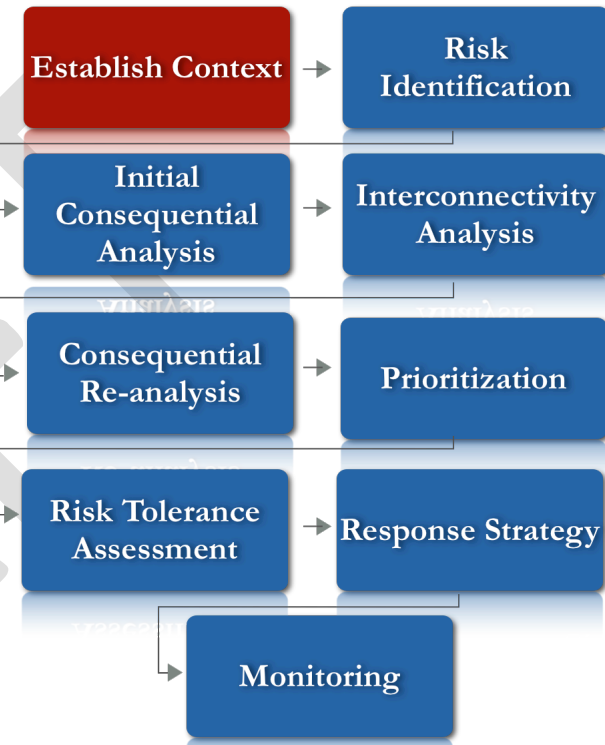
IV BOARD RISK OVERSIGHT FRAMEWORK



V BOARD OVERSIGHT OF RISK – ESTABLISHING CONTEXT

Fundamental to gaining a broad understanding of the risk environment is examining the current conditions in which the organization operates. This includes an appreciation of the:

- ✦ macro-economic environment
- ✦ geopolitical risks
- ✦ size, nature and unique characteristics of the industry, geographic markets and customers
- ✦ fragmentation, relative size and strengths of competitors
- ✦ basis of competition



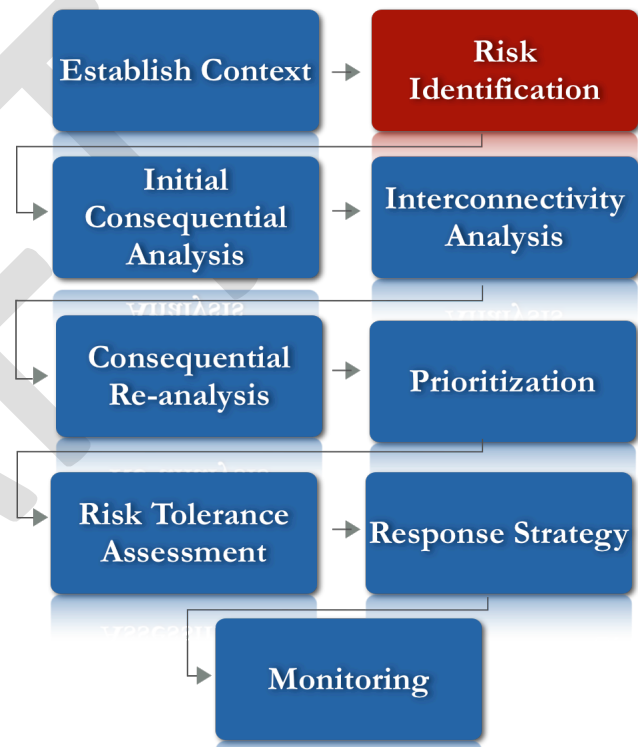
Generally, boards of directors gain a contextual understanding of the conditions in which the corporation operates through their ongoing oversight activities. However, subtle changes in the industry or competitive environment may signal the emergence of important trends that can create significant opportunities or risks.

BOARD OVERSIGHT OF RISK – IDENTIFICATION AND CATEGORIZATION OF RISK

IDENTIFICATION AND CATEGORIZATION OF RISK

The identification and categorization of risk that may materially affect the performance, asset values or even the viability of the enterprise often requires extensive input from both management and boards of directors.

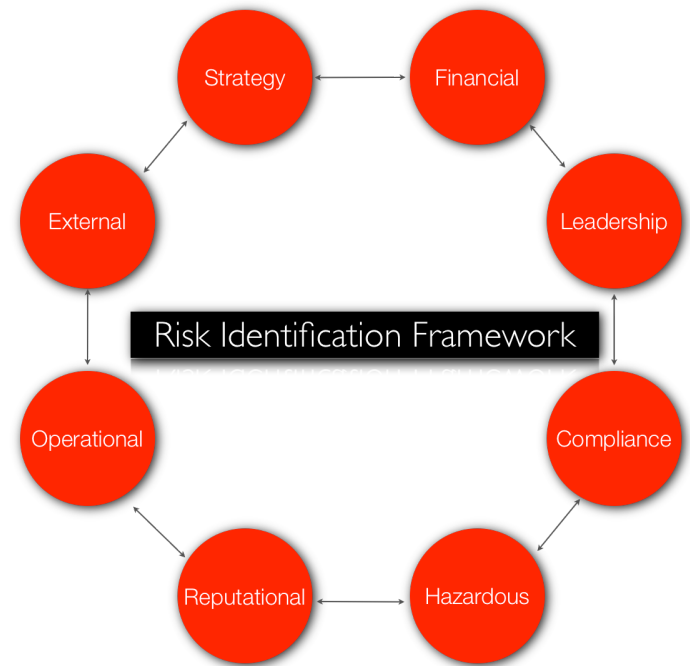
A framework to assist boards of directors in the identification process may be useful. On the following pages is a framework that shows risk categories, ranging from strategic and operational risk through to external and reputational risk.



Too often this process focuses on external risks such as natural disasters, potential actions of competition and environmental issues. Ironically, the most significant risks frequently lie internally. To a large degree this can be managed by an alert management team and by the board of directors.

BOARD OVERSIGHT OF RISK – IDENTIFICATION AND CATEGORIZATION OF RISK

Strategic risk	Market trends and performance; competition; selection of ineffective strategies; acquisitions
Financial risk	Liquidity; capital availability, capital structure
Organizational risk	Leadership depth and quality, management and labor availability and cost; cultural alignment
Operational risk	Customer satisfaction; product failure; service quality; capacity constraints; vendor and distribution dependencies; input quality and pricing
External risk	Macro-economic volatility; industry structural change; industry cyclical
Hazard risk	Liability torts; property damage; natural catastrophe; environmental
Compliance risk	Compliance with applicable laws and regulations
Reputational risk	The consequence of acts, events and perceptions



VI BOARD OVERSIGHT OF RISK – STRATEGIC RISK

BOARD OVERSIGHT OF STRATEGY

The primary risks associated with strategy are the selection of strategies that are inappropriate in the circumstances, the inability of the corporation to execute and the timeliness of implementation. The consequences of poor strategy formulation or execution are at best, underperformance, and at worst, can threaten the viability of the enterprise.

Critical to gaining an understanding of strategic risk is determining, in rank order of importance, the key drivers for competitive advantage. There are seldom more than five or six critical drivers that, if improperly executed, can create enormous risk. For example, in the advanced technology sector, maintaining market-driven technology leadership, and development and execution of product or technology roadmaps are two important factors for success or failure.

Contrasting typical board oversight of risk relating to financial reporting versus oversight of risk inherent in strategy illustrates the need for increased board focus on assessing strategic risk. While not minimizing the importance of accurate financial reporting for the proper functioning of capital markets, the importance of strategy to create shareholder value is undeniable. Yet the contrast between the oversight of financial reporting versus strategy is staggering.

In virtually all public companies, there are substantial systems, processes, professionally trained resources, regulations, validation and oversight involved in ensuring the accuracy of financial reporting. Financial reporting has well defined rules and parameters, often known as generally accepted accounting principles. Those principles are interpreted and modified by extensive resources within the public accounting profession along with regulatory bodies such as the securities commissions. Stock exchanges require annual financial statements and systems of internal control to be audited by qualified, independent accounting firms. Companies employ professionally trained finance and accounting staff to prepare financial statements. Internal control systems are constantly being assessed and validated by internal audit groups that report directly to the Audit Committee of the board. Audit committees are mandated to have qualified independent directors who appoint and supervise external and internal audit, review annual and quarterly financial statements as well as reports relating to internal control systems. All these resources, prescribed rules, regulations and internal systems are designed to minimize the risk of a material error in financial reporting.

In contrast, there are no rules or regulations governing how strategy should be developed and presented. There are no professional standards or qualifications for those developing strategy. There are limited, if any, independent validation procedures. There are no mandated board processes to oversee strategy. It is not that most boards spend too little effort on financial reporting; it is that most boards need better processes and tools to assist in the oversight of strategy, particularly the area of strategic risk.

BOARD OVERSIGHT OF RISK – STRATEGIC RISK

BOARD OVERSIGHT OF STRATEGY (CONTINUED)

At the risk of both being controversial and generalizing, few companies produce comprehensive, fact based strategic plans. Most are riddled with anecdotal data that by its nature is unverifiable. Many contain bold statements about leadership and level of competitiveness without hard facts to back up such claims.

In their oversight role, boards of directors should recognize that even a highly capable management team may underestimate the importance of objectively assessing its competitive advantages and disadvantages against key business drivers. This can lead to the development of strategic plans based on the assumption of sustained growth while ignoring the risk of contraction, overestimation of the company's own capability and underestimation of the competition.

TOOLS TO ASSIST BOARD OVERSIGHT OF STRATEGY

Validation of Product/Service Differentiation - Independent Customer Interviews

Achieving competitive advantage through product or service differentiation is a critical component of any organic growth strategy. In any industry, competitors inevitably lay claim to superior product or service attributes. How does a board understand and validate a company's customer value proposition? How will the board know when the enterprise is losing competitive advantage and when changes are required?

A useful tool in assessing strategy (and associated risk) is engaging an external firm to conduct periodic customer interviews. While many companies have institutionalized customer satisfaction surveys, such surveys are prone to provide inconclusive information for several reasons, including the design of the questions, response bias, type of respondents and lack of competitive comparisons.

An example of a superior customer insight model involves the use of an outside firm (most often a strategy consulting firm) to assist in the design of the survey, the selection of respondents, the conduct of the survey and analysis of the results. Survey design gets at the issue of asking the right questions around strategy. For example, a question to understand the customer value proposition might be: "In rank order of importance, what are the five characteristics of a product (or service) that are most important to you?" To assess competitiveness, the follow-on question might be: "In considering the five important characteristics, how do each of the major companies in this sector compare?"

BOARD OVERSIGHT OF RISK – STRATEGIC RISK

TOOLS TO ASSIST BOARD OVERSIGHT OF STRATEGY (CONTINUED)

Validation of Product/Service Differentiation- Independent Customer Interviews (continued)

The selection of respondents should include current, former and competitor customers to properly calibrate not only the views of loyal customers but also those that no longer use the product or service as well as customers of competitors. To obtain objective data, the company ideally should not be identified to respondents. However, disclosure is often required to gain access to key customers. Better results are usually achieved by face-to-face interviews in which the interviewer has the background and experience to ask probing questions and accurately characterize answers. In situations where the customer base is relatively small, it may be appropriate to interview several different individuals at a single customer company. Survey results require both detailed analysis and interpretation, and often include verbatim customer comments.

In many cases, management may not embrace the need for customer interviews, citing its intimate knowledge of the customer base. Seldom does management apply the same rigor in canvassing former or competitor customers from which discerning information can be gained. Often the results of a comprehensive customer interview process can be both surprising as well as insightful.

The board does not necessarily need to be the body engaging external firms to develop and complete customer interviews. However, the board should be privy to the results and have the opportunity to meet directly with the consultants.

Competitive Analysis and Business Model Benchmarking

Almost unfailingly, strategic plans provide limited competitive information. Most are in the form of so-called SWOT analysis (Strengths, Weaknesses, Opportunities and Threats). There are at least four limitations to such analyses. First, most lack fact-based analysis to back up the statements. Second, such analyses assume competitors remain frozen in time and are unable to take action or change course. Third, management has a built in bias to overestimate its position and underestimate competition. Finally, and most importantly, SWOT analysis does not get to the heart of strategy because it generally fails to comprehensively address how the enterprise stacks up against the competition on the key strategic drivers (such as product differentiation, cost position, channel delivery etc.).

How many board members have reviewed strategic plans that claim the enterprise is the leader in technology or customer service or is the low cost producer? How does a board become comfortable that these propositions are true? Do board members ever ask management to provide hard data to back up these claims?

BOARD OVERSIGHT OF RISK – STRATEGIC RISK

TOOLS TO ASSIST BOARD OVERSIGHT OF STRATEGY (CONTINUED)

Competitive Analysis and Business Model Benchmarking (continued)

The heart of effective competitive analysis lies in three primary concepts. First, it should measure competitiveness against the critical factors that make companies successful in their industry (herein referred to as “business drivers”). Second, the analysis should be data-driven and fact-based. Finally, the interpretation should be as objective and unbiased as possible.

There are vast sources of competitive information available both inside an enterprise and externally. Customers and vendors are excellent sources. Search engines can produce a surprising amount of competitive data. Similarly, public filings are good sources of information. This data can be supplemented using external consultants that have relevant industry access and experience and extensive databases. It may also be useful to engage specific expertise (to assess technological competitiveness, for example).

As part of competitive analysis, it is useful to compare business models in the form of financial comparison. It is insightful to benchmark competition not only against traditional results (earnings, revenue growth, return of capital, return to shareholders etc.) but also to examine margin levels and line item costs such as general and administrative expenses. The analysis should not stop there. The real value in competitive benchmarking is in understanding why the differences arise. For example, why does a competitor produce consistently higher margins? Factors might include superior products, breadth of product lines, cost structure, pricing strategy etc.

Strategy Process Audit

Often boards of directors do not have insight into the processes by which management develops strategy. What tools are used? What are the sources of information? How fact-based and rigorous is the analysis? Are the conclusions based on objective data? Is the format and structure of the plan comprehensive?

It might be useful (for a modest fee) to engage strategy consultants not to work specifically on company strategy, but rather to assess the current processes used by management to create strategy. This assessment would examine such areas as the analytical rigor used to develop fact-based strategy, the validity and importance of underlying assumptions, the bases for determining objectives, and the sources of information used to assess industry and competitive data. To make the engagement more management-friendly, it could be characterized as a best-in-class benchmarking exercise. Again, either the board or management could engage the consulting firm, provided the board had unfettered access to the consultants’ verbal and written reports.

BOARD OVERSIGHT OF RISK – STRATEGIC RISK

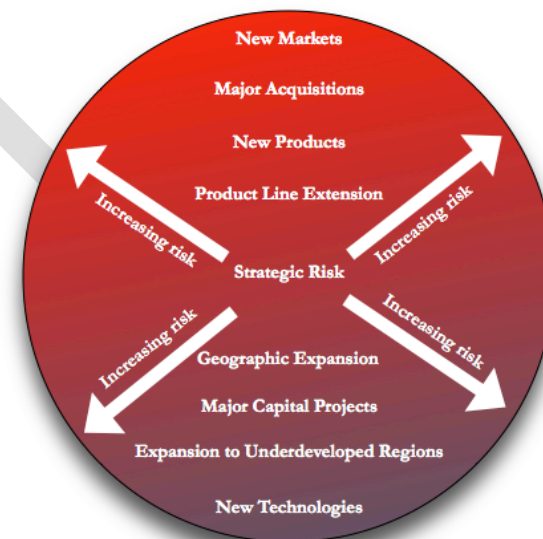
TOOLS TO ASSIST BOARD OVERSIGHT OF STRATEGY (CONTINUED)

Major Strategic Initiatives

In the life of every corporation, major strategic initiatives are undertaken either for offensive or defensive reasons. The diagram to the right may assist boards both in understanding the riskiness of a strategic initiative and in determining the appropriate level of board involvement. Initiatives in the center of the diagram are lower risk, with highest risks located in the outer perimeter.

Strategies such as product line extensions and geographic expansion into known territories are typically lower risk; if unsuccessful, they have reasonably predictable consequences. Depending upon the circumstances and nature of the business, new product development strategy and major capital projects might fall into the medium risk category.

In higher risk situations, such as entry into new markets (in which the corporation has limited experience) or developing new technologies, the board may wish to utilize external expert advice to better understand and validate the strategy. The board need not engage advisors directly. However, the board should be privy to advisor reports and have face-to-face dialogue as required.



Stress Testing Through Financial Modeling

Virtually every company of size maintains a longer-term financial forecast with a time horizon typically three to five years. Such forecasts are used to calibrate longer-term plans, to assess longer-term projects and capital expenditures, and for scenario development (so-called best case, worse case, most likely case).

Financial modeling is an important tool for boards to use in calibrating risk. It will be referenced in several areas in this document.

Strategic plans presented to boards rarely show downward trends in competitive or financial performance, yet in reality this occurs every day. Underperformance takes place for a variety of reasons, including misjudgments in assumptions, unplanned external events, under-estimation of competitive strengths and actions, and overestimation of the company's capabilities or competitive advantages. Accordingly, worse case analysis may not truly be the worst case.

BOARD OVERSIGHT OF RISK – STRATEGIC RISK

TOOLS TO ASSIST BOARD OVERSIGHT OF STRATEGY (CONTINUED)

Input into Output

A valuable board process is to ask management well in advance to provide an outline of what it intends to produce as a final strategy document, its sources and approach to data gathering and analysis, and key assumption requirements. Alignment of planned output with board expectations prevents both parties from being blind-sided on the day of presentation.

If the axiom that management receives the labor union it deserves is valid, then the same can be said about boards and strategy. How often have boards received strategy documents that are at best incomplete, yet boards fail to address the issue by insisting that management go back to the drawing board? Part of the fault for poor strategy lies in the board's failure to set out its expectations well in advance.

Constructive Feedback and Actions

Even with the best intentions, strategic plans often fall short of the board's expectations. A helpful tool is a formal post-mortem process a week or so after the strategy presentation in which board members identify the areas where further analysis or clarification is required, where strategies may be misaligned with goals, or where underlying assumptions appear to be too optimistic, pessimistic or invalid. Feedback to management on the plan shortcomings is critical, yet ineffective unless management is tasked to modify (or even redo) strategy until the board is satisfied.

Post Strategy Presentation Risk Assessment

Frequently, the final section in a strategic document is a risk assessment, often focusing on the potential variability of critical underlying assumptions. Time set aside for discussion on this section is often insufficient. Rather than pay lip service to an incomplete risk section in a strategy document, some boards prefer to separate the strategy presentation from a fulsome discussion on strategic risk. It is helpful to schedule a risk review session within a month or so following the strategy presentation. This allows boards and management to reflect on strategy solely from a risk perspective and set aside sufficient time for discussion.

BOARD OVERSIGHT OF RISK – STRATEGIC RISK

TOOLS TO ASSIST BOARD OVERSIGHT OF STRATEGY (CONTINUED)

Oversight Processes

Effective board oversight processes set aside sufficient time at and between meetings for reflection and obtaining additional information. It is common for boards to hold several meetings on risk oversight along these lines:

Initial session with management to review approach, sources of data, assumptions and outline of strategy document (see Input into Output on page 19)

Initial strategy presentation by management

One or more follow-up sessions on open issues, additional analyses or other information

Formal post-strategy meeting exclusively on risk in strategy (see Post Strategy Presentation Risk Assessment above)

At each board meeting there should be in camera sessions without management presence.

VII BOARD OVERSIGHT OF RISK – STRATEGIC RISK IN MERGERS AND ACQUISITIONS

OVERVIEW

There should be little debate that major acquisitions pose risk. Without attempting to quote statistics, it is fair to say that a substantial number of acquisitions fail to meet expectations and often create little or no value for shareholders. Acquisitions are inherently risky because of uncertainties, complexities, and an abundance of moving parts. Outright failures or underperformance of acquisitions occur for several reasons, including misalignment with a corporation's overall strategy, insufficient due diligence and ineffective post-acquisition integration. However, acquisitions often form an integral part of a company's growth strategy and cannot be ignored or discounted.

The degree of board involvement in acquisitions can and should vary depending on several factors such as size, strategic importance, complexity and management capabilities.

Acquisition strategy can be inherently risky because so many factors cannot be accurately predicted and many things can go wrong. Boards need to be extensively involved in major acquisition strategy, assessment, planning, implementation and financing.

TOOLS TO ASSIST BOARD OVERSIGHT OF MERGERS AND ACQUISITIONS

Advance Clarity on Acquisition Criteria

It is helpful for boards and management to reach a common understanding of the criteria for prospective acquisitions to ensure alignment with overall strategy and to objectively measure and rank acquisition opportunities in advance of discussions with prospective targets. Such criteria might include strategic importance (product or geographic expansion; market share consolidation; capability or technology acquisition etc.), competitive advantage gain, price, size, breadth, quality of products and services, customers, tangible assets, historical and financial performance, and synergies.

Comprehensive Fit Analysis against Acquisition Criteria

Boards should insist on reviewing fit analysis against acquisition criteria in two stages. At the early stage (typically before or after preliminary discussions with targets) management should present its comparison of the characteristics of the target versus the criteria. Depending upon complexity, the board may wish to have the comparative fit analysis updated at the completion of due diligence.

BOARD OVERSIGHT OF RISK – STRATEGIC RISK IN MERGERS AND ACQUISITIONS

TOOLS TO ASSIST BOARD OVERSIGHT OF MERGERS AND ACQUISITIONS (CONTINUED)

Negotiation and Valuation

Size and complexity may necessitate the board's direct involvement in negotiations and may also determine whether independent expert advice is required for valuation, negotiation, and structuring purposes. In the case of a sale of a business, an independent committee of the board is typically formed to oversee and often participate in critical parts of the sale process.

Insistence on advance board approval of parameters on price and other key terms can provide important discipline in the negotiation process (without undermining management) and allows the opportunity for reflection and informed decision-making.

Due Diligence and Integration Planning

It is not uncommon for boards to delegate due diligence to management and advisors and then to become aware post acquisition of unexpected issues that should have been identified in the due diligence process. A useful process for boards is to insist on reviewing in advance the scope of due diligence and the outline of the planned report upon completion.

It is also helpful where feasible to utilize members of the due diligence team to perform integration activities post acquisition because of their familiarity with critical issues.

Strategic Validation

Conventional due diligence checklists are frequently overburdened with financial, legal and operational due diligence, with little if any emphasis on strategic validation. Similar to validation of a company's strategy as set out on pages 15-16, the use of an independent comprehensive customer interviewing process can provide valuable insight into the robustness of a target company's competitive advantage, customer value proposition and customer loyalty. In-depth interviews should be carried out with current, former and competitor customers.

Leadership Due Diligence

In many cases, the management of target acquisitions remains with the organization post acquisition but little detailed due diligence is carried out on key team members. By contrast, hiring an executive to join the organization usually involves multiple interviews (and sometimes independent testing and assessments) and reference checking. In reviewing the due diligence procedures, boards should insist that leadership due diligence be conducted at the standard as when hiring an executive into the organization.

BOARD OVERSIGHT OF RISK – STRATEGIC RISK IN MERGERS AND ACQUISITIONS

TOOLS TO ASSIST BOARD OVERSIGHT OF MERGERS AND ACQUISITIONS (CONTINUED)

Stress Test Through Financial Modeling

Similar to stress testing strategy, financial modeling should be used to stress test major acquisitions, with particular focus on liquidity (see Financing below).

Financing

In cases in which acquisitions require external financing, boards should be mindful of debt structure and the complexities and volatility of debt markets. Investors tend to be unsupportive of companies that raise debt or equity to build a war chest for future unidentified acquisitions, preferring to invest when acquisitions are known. This can lead to the requirement for short-term financing to initially fund acquisitions.

Following the capital structure axiom of matching long-term investments with long-term capital (in the form of term debt or equity) requires that short-term acquisition debt be refinanced with either longer-term debt or new equity. Often this forms part of the overall acquisition strategy. The difficulty with this approach is that debt and equity markets may not be available when refinancing is required, potentially resulting in liquidity issues. In examining acquisition strategy that involves bridge financing, boards should ensure that management has a clear refinancing strategy, that capital markets appear stable and receptive to refinancing, and the relationship with current lenders and financial stress testing show a low likelihood of a liquidity issue if refinancing is unavailable.

Financial Staffing

On major acquisitions, boards should insist that senior level company financial staff be appointed to the acquisition management organization. Having reliable financial information and on the ground insight into the business, at least during the integration phases, can provide early warning of potential issues.

BOARD OVERSIGHT OF RISK – STRATEGIC RISK IN MERGERS AND ACQUISITIONS

TOOLS TO ASSIST BOARD OVERSIGHT OF MERGERS AND ACQUISITIONS (CONTINUED)

External Advice

On major acquisitions it is often advisable to engage experts for advice on specific areas. In most cases, management should engage advisors, provided the board has direct access to such experts. In merger and acquisition activities, these are typical engagements and the service providers:

M&A ADVISORY SERVICES	SERVICE FIRMS
Review and validation of specific acquisition target strategy	Strategy consulting firms, industry specific boutique firms
Negotiation and valuation	Investment banks, transactional advisory services in public accounting firms
Leadership and organizational due diligence	Organizational advisors, managerial assessment firms, executive recruitment firms
Financial due diligence	Transactional advisory services in public accounting firms
Financing	Strategic advisory firms, investment banks
Environmental due diligence, legal	Environmental consulting services firms
Compensation and pension due diligence and planning	Compensation and pension advisory firms
Legal services	Legal firms

It is commonplace in M&A transactions (and an economically sound strategy) that certain advisors are paid primarily for successfully completing the transaction. However, boards should be cautious when taking advice from advisors whose fees are contingent on completion of a transaction since there is an obvious bias toward that outcome.

VIII BOARD OVERSIGHT OF RISK – FINANCIAL RISK

OVERVIEW

Financial risk generally falls into three broad interrelated categories: liquidity, capital availability, and capital structure.

Liquidity risk occurs when corporations are unable to generate sufficient internal cash flow to sustain operations. Liquidity issues often arise in situations in which a corporation is in a sustained loss position, when a corporation has major capital expenditures or when large unplanned expenditures are required, such as those arising from unfavorable litigation.

Capital availability often interrelates with liquidity concerns. Capital markets for debt or equity are subject to volatility such that from time to time availability may be constrained or even non-existent. Ironically, such capital markets become inaccessible often at the very time when difficult economic conditions exist and when corporations face liquidity issues.

Finally, the capital structure of a corporation may pose risks particularly associated with the absolute level of indebtedness, the mismatch of short- and long-term debt and the timing and quantum of debt repayments.

Boards of directors should be aware that pressures from investors, the availability of inexpensive debt, and a bias for growth often results in inappropriately high debt levels, often compounded by a structure that is disproportionately biased to a short duration.

TOOLS TO ASSIST BOARD OVERSIGHT OF FINANCIAL RISK

Liquidity Stress Testing

As witnessed in the recent financial crisis, when businesses are in distressed situations the focus shifts rapidly from earnings to cash flow. As part of the examination of overall risk and the corporation's ability to withstand a downturn, stress testing the balance sheet and cash generation capability is very important. In working with management, boards should prudently vary assumptions in business plans (often well beyond management's worst case scenario) to understand the limits of cash generation and debt capacity. Interestingly, cash availability can be an issue not only in a contracting scenario but also in rapid expansion because of working capital and capital expenditure requirements.

BOARD OVERSIGHT OF RISK – FINANCIAL RISK

TOOLS TO ASSIST BOARD OVERSIGHT OF FINANCIAL RISK (CONTINUED)

Duration Analysis

With the tightening of credit markets following the financial crisis, many corporations' indebtedness may show an imbalance in structure and duration of debt instruments. For example, short-term credit facilities may form a part of the sources of funding for longer-term investments (as opposed to the traditional use for funding variations in working capital). Over-reliance on short facilities can pose serious liquidity issues if renewals are at risk. Similarly, longer-term debt that may be coming due may also be problematic to refinance because of volatile credit markets and poor company performance through recessionary periods. Boards should be kept abreast of pending debt renewal dates and undertake refinancing discussions well before term expiry.

Defining the Capital Structure

In understanding the corporation's capital structure on a going concern basis, generally accepted accounting principles may be too limiting. Beyond interest-bearing debt and other conventional liabilities, there can be other off balance sheet liabilities or obligations that should be considered in assessing the strength or gaps in a corporation's capital structure. Examples include pensions and post-retirement benefit obligations, long term operating leases and obligations for large capital projects.

Liabilities for pensions and other post-retirement benefits can be significant and their funding can be subject to volatility depending on underlying assumptions and regulations. Although not typically categorized as part of the corporation's capital structure, financial obligations, particularly for pensions and benefits, are nevertheless liabilities that must be funded and for the purpose of assessing financial risk should be considered as part of the firm's debt obligations.

In capital-intensive businesses, it is common to have large multi-year projects involving significant capital expenditure obligations. Uncommitted capital expenditures technically are not legal obligations; however, absent a liquidity crisis, such expenditures are highly likely to occur and require funding. While capital commitments should be included in a liquidity analysis (see page 25), it may be a helpful exercise to quantify and include such obligations in the capital structure analysis as well in order to understand the full breadth of a corporation's liabilities and ongoing commitments.

External Review of the Capital Structure

To assist a board in understanding the limitations of the corporation's capital structure, it is helpful to periodically engage external advisors to perform a detailed review. The scope of such review should pay particular attention to the nature and structure of indebtedness. For example, in examining short-term credit facilities, there is often a borrowing base limitation based upon working capital levels that may limit borrowings well below the stated size of the facility. As stated previously, one element of a corporation's capital structure that is often overlooked is the liability for pensions and other forms of post retirement benefit programs.

BOARD OVERSIGHT OF RISK – FINANCIAL RISK

TOOLS TO ASSIST BOARD OVERSIGHT OF FINANCIAL RISK (CONTINUED)

External Review of the Capital Structure (continued)

Advisors can provide helpful input regarding the timing of renewals, the state and receptiveness of debt and equity markets, and by characterizing specific lender strategies in volatile or stressed situations. Certain strategy consulting firms will take such engagements at a modest fee. Investment banks also can provide advice although boards should be cognizant that such firms may have a vested interest in recommending capital-raising initiatives.

Finally, boards should be mindful that debt and equity markets may not be available at times when term debt comes due or when new equity is required. It is prudent to take advantage of buoyant markets to access capital or renew debt well in advance of due dates.

Capital Availability Review

As outlined above, external advisors can be helpful in assessing debt and equity markets for renewals and additional capital. Unfortunately, in periods of volatility, capital and debt markets can close rapidly. Accordingly, sources of capital may be limited to monetizing assets through outright sale or sale-leaseback, stretching vendor payments and reducing current assets through various means. It is worthwhile for boards to periodically assess cash availability under various scenarios and combinations to determine risk thresholds. This will be discussed later in the Risk Tolerance section.

Boards should be wary of industry benchmarking data and should take cold comfort in knowing the corporation's capital structure is in line with its competitors.

IX BOARD OVERSIGHT OF RISK – ORGANIZATIONAL RISK

OVERVIEW

Organizational risk spans leadership quality and depth, management and labor performance and availability, organizational cost and cultural alignment.

Ineffective leadership poses the greatest organizational risk to the corporation. Within the corporate context, leadership typically encompasses the chief executive officer (CEO) and other officers of the corporation. The notion that the board generally plays an oversight role is altered in the case of corporate leadership risk. In this case, the board has direct responsibility in the selection as well as the assessment of the performance and capability of the chief executive officer and, to a certain degree, other corporate officers.

Assessing the ability of management to develop and execute the vision and strategy for the corporation as well as operate the business day-to-day goes well beyond quantitative measures such as financial performance and operational metrics. Boards must assess executives' performance on qualitative measures and competencies including strategic capability, talent acquisition and retention, the ability to motivate and align staff with a positive culture, and exercise of good judgment particularly in risk/reward situations.

In a global market in which maintaining low labor costs is an important competitive differentiator, corporations are realigning compensation and work practices in higher cost jurisdictions and shifting skilled and semi-skilled labor to lower cost regions, either by establishing operations in developing economies or through outsourcing. Failure to keep pace with changing labor dynamics may pose substantial competitive risk.

Boards of directors should continuously assess the performance, capabilities and skills of the leadership team, particularly in light of changing market and competitive dynamics and the trajectory of the corporation's performance.

BOARD OVERSIGHT OF RISK – ORGANIZATIONAL RISK

TOOLS TO ASSIST BOARD OVERSIGHT OF ORGANIZATIONAL RISK

Leadership assessment

The capability and performance of the chief executive officer is critical to the success of any corporation and also poses significant risk. Most boards undertake an annual review of the performance of the chief executive officer. It is atypical for the review to focus on the results of the business and the CEO's performance against specific annual objectives.

It may be useful for boards to periodically review the chief executive officer against other measures including capability and suitability. To evaluate CEO capability, it may be helpful to compare the qualities and capability of the CEO against the criteria used in hiring for that position. This would involve the assessment of areas such as leadership, team building, vision and strategy, internal and external communications, track record, judgment, foresight and risk management.

The review of a CEO's suitability addresses the alignment between the strengths of the CEO and the prospects for the business. Businesses often cycle through periods of growth, stagnation and even contraction. Not all leaders are well suited to manage in all scenarios. For example, in periods of contraction, growth-oriented CEOs are often slow to address cost issues, preferring to retain capability and attempt to grow out of the situation rather than scaling the business within realistic revenue parameters.

Board members can gain valuable insight into a corporation's culture and quality of leadership through formal or casual interaction with staff at all levels of the organization. Boards should be wary if the chief executive officer limits board access to employees.

Compensation Bias

Traditional executive compensation with high variability and a significant equity component designed to align executives with the interests of shareholders also by its nature encourages executives to take risks. Boards should ensure that such compensation practices are not so heavily skewed that they drive undue risk taking.

The criteria and structure of compensation arrangements for the Chief Financial Officer could be different from the CEO in order to reward financial prudence. Independent advice on the at-risk component of executive compensation can be useful.

BOARD OVERSIGHT OF RISK – ORGANIZATIONAL RISK

TOOLS TO ASSIST BOARD OVERSIGHT OF ORGANIZATIONAL RISK (CONTINUED)

Tone at the Top

The term “tone at the top” is often used in connection with the internal control environment. It can equally be applied to assess the leadership team’s tolerance and prudence in managing risk. A board may ask itself if the corporation’s executives are appropriately balancing risk with reward and acting prudently in higher risk situations or in significant transactions.

Talent Review versus Succession Planning

Most boards conduct periodic succession planning reviews to assess management continuity issues at the executive level. Most succession planning analysis identifies potential successors in terms of capability and timeline for readiness to move into more senior positions.

It may be helpful to boards to also undertake a talent review to address the depth of talent in the organization and its scalability. Boards may ask questions such as: What are the higher impact management positions (those that most directly affect results)? What are the performance ratings of the incumbents currently in those positions? Are those individuals capable of managing should the business expand by 30%, 50%, and 100%?

CEO Planned Retirement

Corporations may be fortunate enough to have an orderly CEO succession plan in which the CEO retires and his or her replacement has been identified. In many cases, the timing of the CEO’s retirement is determined by a personal agenda. Boards should be cognizant that an orderly CEO succession can create a lame duck situation or leadership stagnation as soon-to- retire CEOs may be less likely to drive forward towards a longer term vision and become risk averse. While delicate, in situations in which a CEO successor is in place and ready to assume the top position, the board may wish to accelerate the timing of the incumbent’s retirement.

CEO / Chair Succession

In certain instances, often in a planned succession situation, when a CEO steps down from the position, he/she may be considered to take on the role of chair of the board. While the CEO brings extensive company experience and knowledge, it is not uncommon for the CEO to be overly supportive or lack objectivity in assessing the performance of the successor. Additionally, with today’s fast-changing pace of business, previous CEOs may become out of date; yet remain unduly influential at a board level. Either situation can create risk for a board. Finally, current securities regulations related to independence limit the direct involvement of former CEOs in certain board matters.

Boards should exercise caution in considering CEO/Chair succession; assessing and balancing experience and knowledge with objectivity and independence.

X BOARD OVERSIGHT OF RISK – OPERATIONAL RISK

OVERVIEW

Operational risks typically are very broad and often unique to each corporation. However, common operational risks include customer dissatisfaction, product and service quality, technological competitiveness, capacity constraints, vendor and distribution dependencies and input quality and cost.

Determining which operational risks are critical requires mapping the strategic drivers of the business and key competitive differentiators. For example, technology leadership may be critical in an advanced electronics business but less so in food distribution. Operational risk often involves failure to execute rather than selection of a flawed strategy.

Boards of directors should focus risk assessment on those operational elements that represent competitive advantage and that are strategically critical to the success of the business.

TOOLS TO ASSIST BOARD OVERSIGHT OF OPERATIONAL RISK

Customer Satisfaction –Independent Customer Interviews

As discussed on pages 15-16, comprehensive customer interviews can provide excellent insight into the effectiveness of a corporation's strategy as well as pinpoint operational issues including product reliability, service quality, perceived value for money and delivery performance.

Product Failure Analysis

In instances where product quality is a major risk or if the board has concerns with product quality, the analysis of product failures both prior to shipment (as identified in the quality assurance process) as well as products returned from customers can help pinpoint underlying operational flaws.

Capacity Constraint Analysis

In situations where corporations face capacity limitations that could result in a performance risk, it is helpful for boards to review capacity utilization and constraint analyses, identifying where there are capacity limitations at various volume levels, the reason for capacity constraints (buildings, equipment, labor) and requirements and timeline to alleviate such constraints.

BOARD OVERSIGHT OF RISK – OPERATIONAL RISK

TOOLS TO ASSIST BOARD OVERSIGHT OF OPERATIONAL RISK (CONTINUED)

Competitive Margin Analysis

It is most often the case that when a corporation consistently earns higher margins (gross, operating and pretax margins) than its competitors, it reflects some form of competitive advantage. This could be the result of several factors including scale, product technology, product mix, manufacturing cost, distribution, sales and marketing and administrative efficiencies.

Detailed benchmarking of a corporation's margins against leading competitors may provide useful insight into strategy, business models and operational performance.

Vendor and Distribution Dependencies

Reliance on one (or very few) vendors and distributors can be a source of significant operational risk. Boards should understand the critical areas of dependencies and periodically review vendor financial health, capacity breadth and limitations (single/multiple facilities), business relationships, competitor positions with the vendors (such as preferential treatment in periods of capacity constraints) and alternative sources of supply.

Overreliance on Regulators and Agencies

While it is comforting to have regulatory oversight or ratings from independent expert agencies, over-reliance on such bodies can be dangerous, as demonstrated by the recent meltdown of financial markets in which certain mortgaged-backed securities proved to be much higher risk than rating agencies had assessed. Boards and management should exercise caution and carry out thorough due diligence even when there is regulatory or independent agency review of the company's operations.

XI BOARD OVERSIGHT OF RISK – EXTERNAL RISK

OVERVIEW

As recently evidenced by a largely unanticipated global credit crisis and consequential deep recession, unforeseen macro-economic volatility can pose substantial risk to an enterprise, ranging from reduced market demand to changing competitive behavior to limitations on liquidity and capital availability.

Similarly, changes within the industry that a corporation operates in (either structural or cyclical changes) can create high risk situations.

Boards of directors must be cognizant of macroeconomic or industry-specific forces that could significantly alter a corporation's performance, trajectory or competitive position.

TOOLS TO ASSIST BOARD OVERSIGHT OF OPERATIONAL RISK

Macro-economic Volatility

As recently witnessed in the financial crisis of 2008 and its follow-on recessionary impact, corporations face periodic economic downturns that are often difficult to foresee and equally difficult to predict in terms of duration and depth. Unforeseen and uncontrollable external events can cause major risks to corporations. Boards should address a corporation's capability to withstand economic shock through the use of tools such as stress testing of capital structure/liquidity analysis and assessment of ability to rapidly reduce costs in anticipation of reduced revenue.

Industry Cyclicity

Many industries are subject to cyclicity that arises from macro-economic factors or industry and specific competitive forces or behaviors (chronic capacity expansion as an example). In cyclical situations, boards should understand competitive dynamics in periods of contraction (pricing, capacity management etc.) and obtain clarity on the corporation's strategy to sustain itself through trough periods. This strategy should address management's capability and ability to foresee a cyclical downturn, its proactive plan to reduce capacity and costs (without impairing its customer value proposition) as well as capital structure/financing strategy.

BOARD OVERSIGHT OF RISK – EXTERNAL RISK

TOOLS TO ASSIST BOARD OVERSIGHT OF OPERATIONAL RISK (CONTINUED)

Industry Structural Change

Structural change within an industry may not always be apparent and can often be characterized as part of conventional cyclicalities. Accordingly, structural change may not easily be detected. The recent recessionary effect on the North American auto industry is obvious. However, the industry and its supply base is also undergoing structural change brought about by foreign ownership, shifting of production and research and development functions offshore, restructuring of dealership networks and refinancing activities. The competitive landscape for this industry has irrevocably changed.

As industries undergo macro-economic shocks or industry specific transformational events (such as competitor consolidation), boards should be cognizant that the strategic drivers and competitive dynamics may necessitate a significant change in fundamental strategy.

OTHER RISKS

Without diminishing the importance of other risks such as compliance, environmental, health and safety, geo-political, and reputation, these are typically handled at the management level and board involvement is limited to oversight at a board committee level.

XII BOARD OVERSIGHT OF RISK – INITIAL CONSEQUENTIAL ANALYSIS

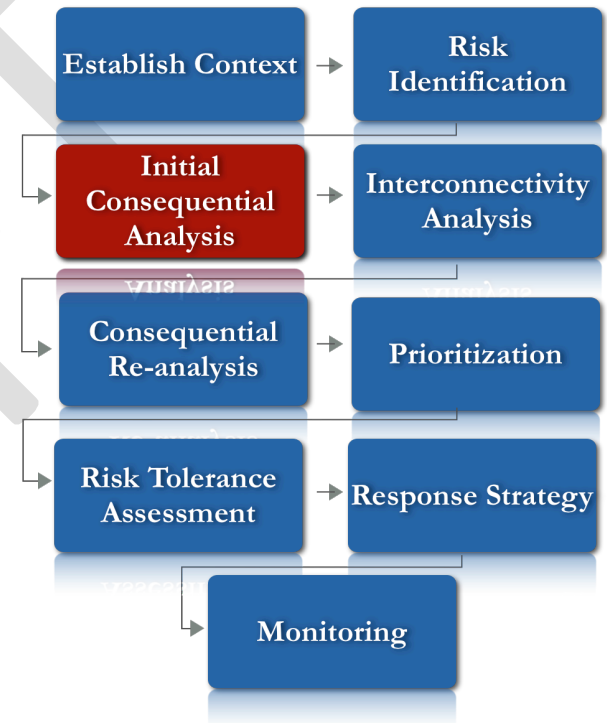
OVERVIEW

Having identified various types of risk, the next step is to determine the potential materiality of each individual risk and the likelihood of occurrence. There are various models and graphic representations of risk calibration and probability distributions of outcomes for each material risk. However, there is no exact science to this analysis. In most cases it is somewhat subjective. What is important is that boards of directors clearly separate the analysis of the severity of the exposure from the likelihood of occurrence. That is, the severity of risks should first be calibrated in rank order of impact without regard to possible occurrence.

It may be sufficient to classify such risks in categories such as Very High (threatens the viability of the corporation), High (results in a degradation in performance or reduced asset valuation), Moderate (could affect results or performance but not materially), and Low (no material effect on the corporation).

Risks should then be classified by likelihood of occurrence (High, Moderate, Low).

Finally, the same risks should be assessed in light of ability (or inability) to mitigate. This will be discussed in the Response Strategy section.



BOARD OVERSIGHT OF RISK – INITIAL CONSEQUENTIAL ANALYSIS

TOOLS TO ASSIST BOARD OVERSIGHT OF CONSEQUENTIAL ANALYSIS OF RISK

Heat Mapping

A simple but useful tool to pictorially prioritize risk along the lines of severity, likelihood, and ability to mitigate is a heat map. This color-coded model allows boards to focus on critical areas of risk. Obviously, the categorization and ranking of risks is not an exact science. It requires elements of subjectivity and judgment. It is not as critical to rank the top five or six risks in order of importance as it is to ensuring that the top five or six risks are identified and addressed.

This is an example of a heat map for strategic and financial risk in a manufacturing company. See Appendix 1 for an example of a completed heat map across all risk categories.

RISK CATEGORY	SEVERITY	LIKELIHOOD	INABILITY TO MITIGATE
Strategic			
Failure to develop and execute a strategy	Very High	Moderate	Moderate
Insufficient new customer revenue acquisition	High	Moderate	High
Failure to execute on a business model	High	Moderate	Moderate
Failure to establish a viable low cost manufacturing site	High	Moderate	Moderate
Insufficient capital equipment replenishment and upgrades	High	Moderate	Moderate
Possible opportunistic takeover bid at a depressed value	High	Low	High
Financial			
Failure to attain bank covenant level performance	Very High	Moderate	High
Failure to renew current loan facilities	Very High	Low	High
Change in lender and loan policies and practices	Very High	Moderate	High
Reliance on shorter term debt arrangements to support growth	High	High	High

XIII BOARD OVERSIGHT OF RISK – INTERCONNECTIVITY OF RISKS

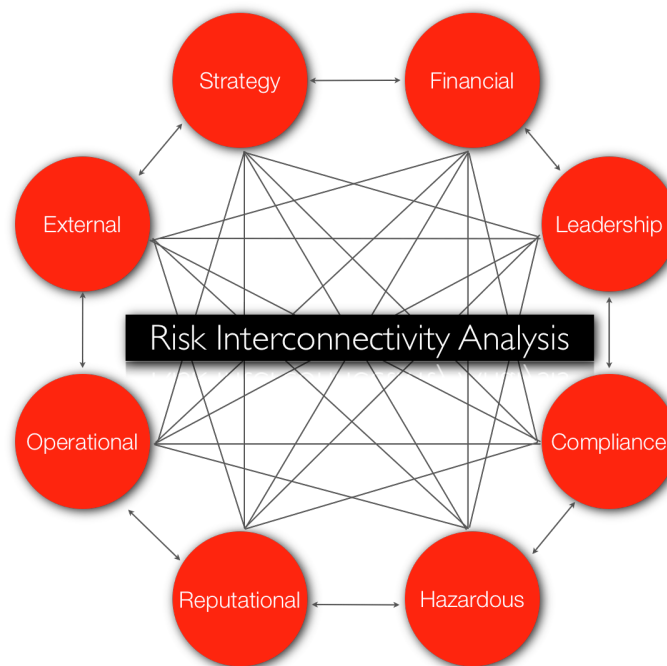
INTERRELATIONSHIP AND COMPOUNDING EFFECT OF RISKS

Unquestionably, the most difficult and most important element of the oversight of risk is evaluating the interconnectivity of risks and the compounding exposure when two or more occurrences take place simultaneously. Often, several higher risk conditions have been present for years and the occurrence of a single major event constitutes the final blow.

In Nassim Nicholas Taleb’s 2007 book *The Black Swan*. Taleb regards almost all major historical events, scientific discoveries and artistic accomplishments as "black swans": undirected and unpredicted. That is, the occurrence is not predictable, it has significant consequences and in retrospect, the event can be rationalized as if it had been expected.

This phenomenon may be best illustrated by an extreme example. The demise of the North American auto industry has been attributed to failure to adjust strategy in the face of newer competition, an uncompetitive product and distribution cost structure, ineffective leadership, a balance sheet over-burdened with debt compounded by an unprecedented downturn in the global economy. Ironically, these risks were spelled out in public documents year after year in excruciating detail. This so-called “perfect storm” had its origins decades ago.

While there are an enormous number of permutations in potential risk interrelationships, boards may wish to focus on the combined effect of individual risks already identified as High or Very High risk.



Company failures, much like air disasters usually are the result of the combination of many factors occurring simultaneously. Through a backward facing lens, the origins of these unfortunate and often disastrous events are painfully apparent

BOARD OVERSIGHT OF RISK – INTERCONNECTIVITY OF RISKS

TOOLS TO ASSIST BOARD OVERSIGHT OF THE INTERCONNECTIVITY OF RISK

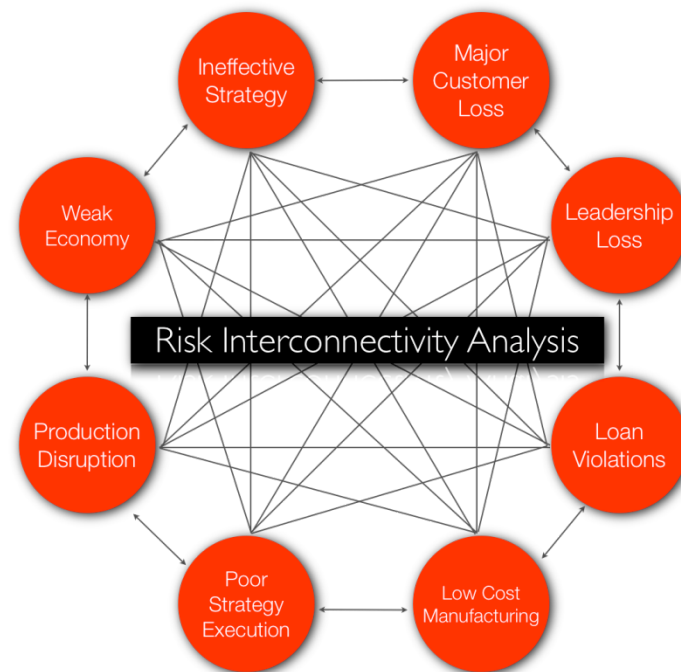
Interconnectivity Analysis

A simple but effective tool to examine the interrelationships and potential compounding effects of risks is to examine the risk heat map as set out in the previous section, focusing on higher risk areas (by severity, likelihood of occurrence and ability to mitigate).

The example in Appendix 1 of a heat map analysis identifies seven areas of potential high risk. There are several risks where the corporation has the ability to control or mitigate. Plotting those risks on a diagram such as the one shown here might be helpful in pictorially displaying interconnectivity issues.

In the case of the example of a manufacturing company in Appendix 1, these are the critical risks which would jeopardize the corporation should two or more occur simultaneously:

- Ineffective strategy development
- Poor strategy execution (customer acquisition, operational performance)
- Loss of major customer(s)
- Significant loan covenant violation or change in lender policies
- Unplanned leadership loss
- Continuing weak economy
- Unforeseen production disruption
- Failure to establish a viable low cost manufacturing operation



XIV BOARD OVERSIGHT OF RISK – CONSEQUENTIAL RE-ANALYSIS

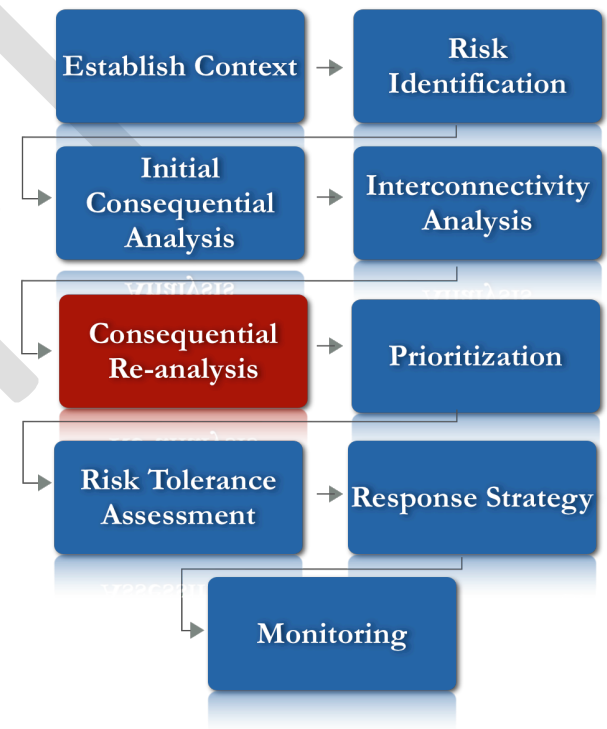
OVERVIEW

Having reviewed the higher risks in the context of the integration analysis, it may be appropriate to perform a re-analysis to determine if the higher risk categories when taken together have a greater impact on the business. This may be appropriate when two identified serious or higher risks are not individually considered life threatening to the corporation but when taken together may become so.

An example might be the loss of a major customer close to the expiry of a major lending facility, such that lenders would be unwilling to renew the facility. While the loss of a customer might be serious, in isolation the corporation would be able to adjust its cost structure and over time replace the revenue. Similarly, reliance on a debt facility (and its renewal) would generally not be a major risk if the business were stable and performing well. However, taken together, these two risks could result in disastrous consequences.

Many larger risks may well be inter-related, particularly when likelihood of occurrence is considered. As in the example in the previous paragraph, the loss of a major customer would likely raise financing concerns with lenders.

Consequential re-analysis may not require specific quantification. Rather, interrelated risks may be re-rated in terms of severity and likelihood of occurrence



XV BOARD OVERSIGHT OF RISK – PRIORITIZATION

OVERVIEW

Having completed the analysis of the various identified, quantified and assessed risks, the next step is to rank order the larger risks by severity in the context of likelihood of occurrence.

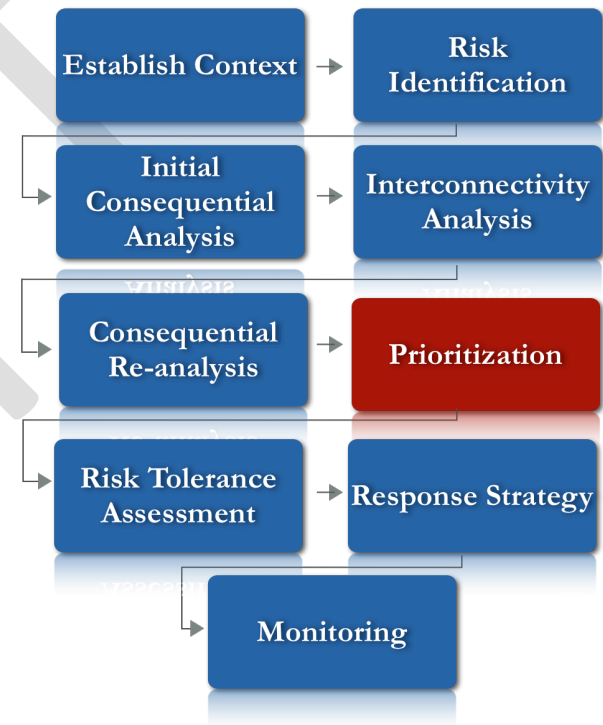
While it is important for boards to understand the breadth of risks facing the corporation, this process allows boards to focus on the critical risks, often not more than five or six.

Specific numerical ranking is less important than carving out risks which, when left unattended, could result in severe if not catastrophic consequences.

Example

In the case of the manufacturing company, the heat map analysis in Appendix I identifies several areas of potential high risk. In addition, the interconnectivity analysis on page 38 shows the critical risks that would lead to unintended consequences should one or more occur simultaneously. In this case, the risk priorities would be reordered along these lines:

- Loss of major customer(s)
- Significant loan covenant violation or change in lender policies
- Ineffective strategy development
- Poor strategy execution (customer acquisition, operational performance)
- Failure to establish a viable low cost manufacturing operation
- Unplanned leadership loss
- Continuing weak economy
- Unforeseen production disruption



XVI BOARD OVERSIGHT OF RISK – RISK TOLERANCE ASSESSMENT

OVERVIEW

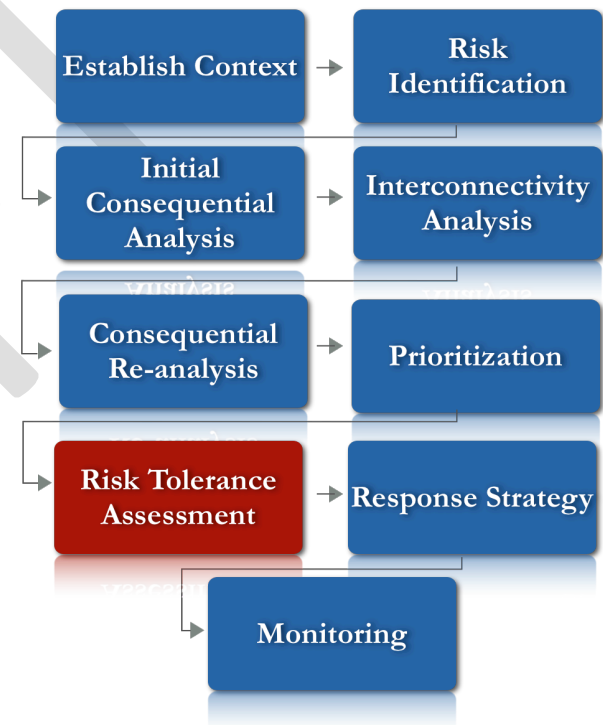
Every corporation faces risk. Appropriately balancing risk and reward to generate satisfactory returns to shareholders is fundamental to any business. However, risk tolerance varies among businesses depending upon various factors, including size and maturity, capital structure, ownership, industry-specific characteristics, geographic concentration and mitigation or response strategy.

Risk tolerance should be viewed in the context of known versus unknown or inadvertent risk. For example, a corporation may be considering a large acquisition, financed largely through debt. The risks may be quantifiable to the extent that it could be determined whether the corporation's capital structure could be sustained should the acquisition turn out to be a failure.

However, many risks are outside of the control of the corporation, and may therefore be hard to reasonably quantify (such as a product recall). Corporations may also unknowingly enter into situations that are riskier than originally assessed.

Risk tolerance should be related to how a corporation views adverse consequential exposure or potential damage. For example, early stage corporations may be willing to sustain considerable losses (and capital erosion) as they develop and bring new products to market. Mature corporations may set their risk tolerance thresholds at a defined level of underperformance. A corporation's tolerance for risk will be influenced by its capacity to withstand adverse consequences.

One important element in sustaining a corporation is the strength of its capital structure. A well-financed corporation can withstand severe adversity whereas a business with a weak balance sheet has little room for error or unexpected negative occurrences.



Boards of directors should not consider risk tolerance in isolation. There is little room in the boardroom for esoteric discussions. Rather, boards should examine risk tolerance in the context of the consequential analysis and mitigation strategies to determine its willingness to accept risk.

XVII BOARD OVERSIGHT OF RISK – RESPONSE STRATEGY

OVERVIEW

Response strategy by its nature must be specific to each company’s circumstances.

There are various ways to avoid, reduce, control or share risk. The response strategy should be balanced by both economics and recognition that all risks may not be able to be mitigated.

Examples of risk avoidance might include limiting the size of acquisitions or major capital expenditure projects, not entering highly competitive markets etc.

Boards should look to management to provide response strategies for every material risk, with particular attention to those on the high priority list.

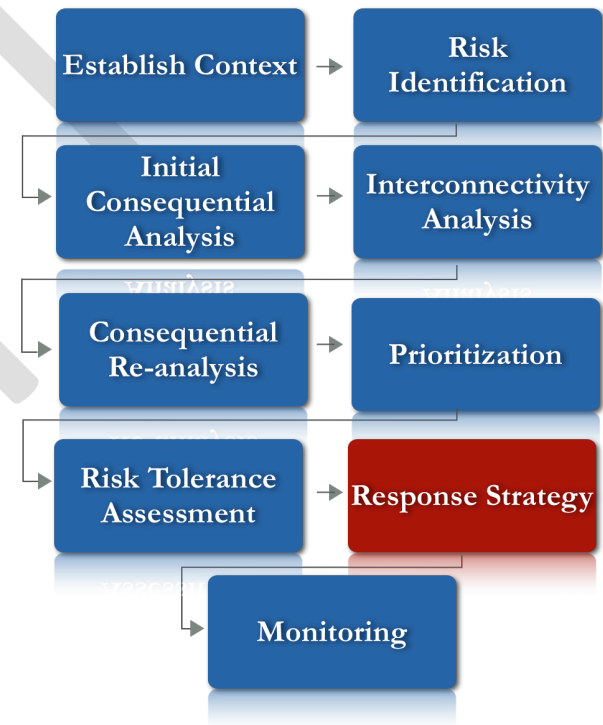
Mitigation may take various forms. For example, an Act of God would be insured against. Normal succession or an accelerated external recruitment process could mitigate against the risk posed by an unplanned resignation of a key executive.

EXAMPLE

In the manufacturing company example, the possible response strategies for the prioritized risks might be as follows:

Ineffective strategy development or execution

- ◆ Ongoing formal assessment of success using key performance indicators, external benchmarking, and other early warning tools (see Monitoring section XVIII)
- ◆ Focus on rapid corrective actions when objectives are not being met
- ◆ Development of alternate strategies and formal contingency planning



BOARD OVERSIGHT OF RISK – RESPONSE STRATEGY

EXAMPLE (CONTINUED)

Loss of a major customer

- ◆ Executive level attention to customer relationship, performance and satisfaction
- ◆ Independent customer surveying
- ◆ Accelerated and extensive new customer acquisition programs
- ◆ Expansion of critical services not easily replicated by competition
- ◆ Strengthen capital structure to allow the corporation to sustain short term losses and fund reorganization expenses

Significant loan covenant violation or change in lender policies

- ◆ Tight financial, working capital and operational management, focusing on near-term results
- ◆ Heightened executive-level communication with lenders, with early and transparent disclosure of potential risks to covenant compliance
- ◆ Expansion of lender base including off balance sheet financing
- ◆ Contingency planning including possible asset divestitures
- ◆ Long-term capital raising

Unplanned leadership loss

- ◆ Continuously updating unplanned executive succession plan
- ◆ Accelerated executive development programs
- ◆ Talent upgrade through selective recruitment. Potentially this could result in displacing competent but limited potential executives and senior level managers

BOARD OVERSIGHT OF RISK – RESPONSE STRATEGY

EXAMPLE (CONTINUED)

Continuing weak economy

- ◆ Cost reduction/restructuring planning (including hiring freezes)
- ◆ Focus on working capital and manufacturing capacity management
- ◆ Aggressive manufacturing efficiency programs
- ◆ Suspension of major capital projects

Unforeseen production disruption

- ◆ Manufacturing capacity planning (including greenfield sites or acquiring alternate facilities)
- ◆ Business interruption insurance programs
- ◆ Heighten attention to labor matters
- ◆ Reciprocal competitor capacity arrangements in the event of certain occurrences (such as Acts of God)

Failure to establish a viable low cost manufacturing operation

- ◆ Pursue joint venture with local partner
- ◆ Facility purchase
- ◆ Merger or acquisition

XVIII BOARD OVERSIGHT OF RISK – MONITORING

OVERVIEW

Monitoring risks should be an ongoing process for both board members and management. Too often, risk monitoring is relegated to innocuous SWOT analysis contained in strategic documents or as an afterthought in major expenditure proposals

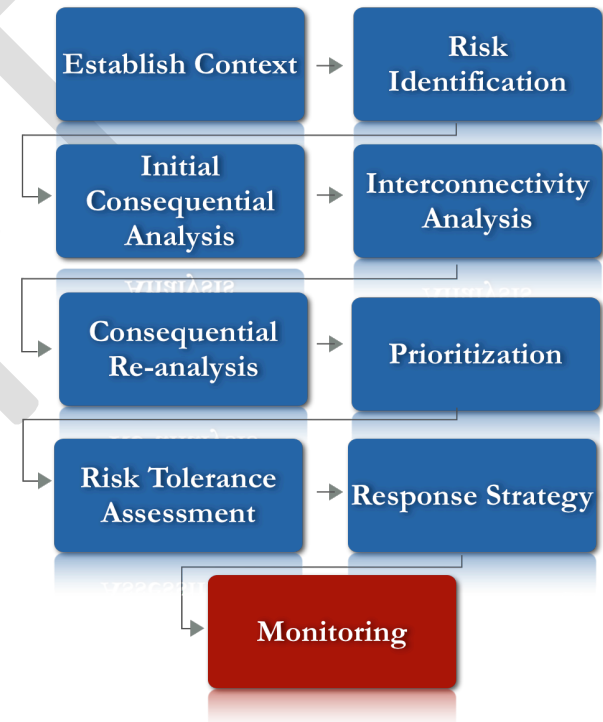
Having established a comprehensive risk identification process, monitoring changes in the risk environment would appear to be straightforward. However, there are instances where boards should be cognizant of subtle yet critical changes that could lead to unfavorable consequences. An example might include an erosion of union/management relations over many years (such as in the automotive or steel industry) that ultimately results in uncompetitive labor cost structure. A second example might involve a fundamental structural change in an industry that is rationalized as cyclicity, such as what the US defense industry encountered following the fall of the Berlin Wall.

TOOLS TO ASSIST BOARD MONITORING OF RISK

Red Flag Identification

Management should be requested to develop an early warning system to monitor critical risks. Examples might include:

- Key performance indicators (including operational and financial metrics)
- Regular customer satisfaction assessment (including win/loss analysis)
- Competitor benchmarking and industry analyst reports
- Updated financial stress testing
- Current executive succession planning



BOARD OVERSIGHT OF RISK – MONITORING

TOOLS TO ASSIST BOARD MONITORING OF RISK (CONTINUED)

Formal Risk Monitoring

As part of the board's annual agenda, formal risk monitoring and review sessions should be scheduled. Such sessions might include external industry expert presentations on the state of the sector, updated competitive analysis and review of key performance indicators related to risk.

Regularly scheduled, thorough risk reviews (with and without management present) should form part of a board's annual agenda. Monitoring should involve both external and internal scanning.

XIX BOARD OVERSIGHT OF RISK – FINAL THOUGHTS

The recent crisis that has gripped world economies and financial markets has brought to the fore the need for increased board surveillance of enterprise risk. The shocking demise of seemingly rock solid institutions such as AIG and Lehman Brothers and the inevitable ending of the lengthy train wreck at General Motors are illustrative examples of the necessity for boards to adopt a comprehensive framework for the oversight of risk. Sadly, in virtually all cases the underlying reasons for the demises of these businesses were known or should have been known by their boards.

Effective board oversight of risks will require rigor, a heightened sense of importance, objectivity and most importantly, the recognition that the unforeseen events and circumstances can and often do occur. Progressive boards will keep watchful eyes and a finely tuned antennas both internally and externally always being mindful that it is seldom a single issue or event that spells disaster but rather several factors occurring simultaneously. Hopefully, board members will have the courage and conviction to raise unpopular or seemingly remote risks and equally boards will have the discipline and enlightenment to listen.

When the consequences of the compounding effect of several risks occurring simultaneously turns into reality, the board will be judged with the curse of perfect hindsight. Dismissing risks too quickly because the unlikelihood of occurrence will be equally dismissed after the fact in the court of shareholder opinion

XX BOARD OVERSIGHT OF ENTERPRISE RISK-APPENDIX I

This is an example of a heat map analysis for a manufacturing company

RISK CATEGORY	SEVERITY	LIKELIHOOD	INABILITY TO MITIGATE
Strategic			
Failure to develop and execute a strategy	Very High	Moderate	Moderate
Insufficient new customer revenue acquisition	High	Moderate	High
Failure to execute on a business model	High	Moderate	Moderate
Failure to establish a viable low cost manufacturing site	High	Moderate	Moderate
Insufficient capital equipment replenishment and upgrades	High	Moderate	Moderate
Possible opportunistic takeover bid at a depressed value	High	Low	High
Financial			
Failure to attain bank covenant level performance	Very High	Moderate	High
Failure to renew current loan facilities	Very High	Low	High
Change in lender and loan policies and practices	Very High	Moderate	High
Reliance on shorter term debt arrangements to support growth	High	High	High
Insufficient availability under current loan arrangements	High	Moderate	Moderate

BOARD OVERSIGHT OF RISK APPENDIX I (CONTINUED)

RISK CATEGORY	SEVERITY	LIKELIHOOD	INABILITY TO MITIGATE
Organizational			
Unplanned resignations at the executive level	Very High	Moderate	Moderate
Ineffective execution of succession plan for the President and Chief Executive Officer	Very High	Moderate	Moderate
Loss of key customer-facing management staff	High	Moderate	Moderate
Insufficient management depth and capability to support growth	High	Moderate	Low
Insufficient key staff retention initiatives	High	Moderate	Moderate
Unfavorable change in the current union/ management relationships	High	Low	Moderate
Operational			
Loss of major customers or loss of share of wallet	Very High	Moderate	High
Failure to execute production to attain satisfactory metrics	Very High	Moderate	Moderate
Failure to align costs with revenue	Very High	Moderate	Moderate
Failure of supply chain execution to procure components at competitive prices	High	Low	Moderate
Customer bankruptcy and inventory write downs	High	Moderate	Low
Lengthy production disruption	Very High	Low	Low
Insufficient capital equipment to meet customer needs	High	Moderate	Moderate

RISK BOARD OVERSIGHT OF RISK APPENDIX I (CONTINUED)

RISK CATEGORY	SEVERITY	LIKELIHOOD	INABILITY TO MITIGATE
External			
Continuing depressed North American economy	High	Moderate	Moderate
Rapid strengthening of the Canadian dollar against the U.S. dollar	High	Moderate	Moderate
Acts of God	High	Low	Low
Rapid increase in interest rates	High	Low	High
Changes in laws or regulations	High	Low	High
Legal claims	High	Moderate	High
Other (Compliance, Hazard)			
Inadvertent breach of laws	High	Low	High
Failure to comply with exchange listing requirements	High	Moderate	Low
Failure in internal controls	High	Low	Moderate