

# A Framework for Board Oversight of Enterprise Risk

Chartered Professional Accountants of Canada



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# Preface

The Corporate Oversight and Governance Board (COGB) of the Chartered Professional Accountants of Canada (CPA Canada) has commissioned this *Framework* to assist boards of directors to fulfill their responsibility for the oversight of risk.

Our discussion of risk oversight issues features a nine-step process to assist directors to:

- better identify and address critical risks
- understand how risks are interconnected
- recognize the potential compounding of risks should unfavourable events occur simultaneously

While boards should not be involved in day-to-day risk management, recent events highlight the need for more proactive and direct engagement over and above traditional oversight of risk management processes.

The COGB acknowledges and thanks John E. Caldwell, the author, and the CPA Canada staff who provided support for the project.

**Tom Peddie, FCPA, FCA**

Chair, Corporate Oversight and Governance Board

**Author John E Caldwell, CPA, CA**

**Gigi Dawe, LLM**

Project Direction,  
Director, COG, CPA Canada

**Corporate Oversight and Governance Board**

Tom Peddie, FCPA, FCA Chair  
Hugh Bolton, FCPA, FCA  
John E. Caldwell, CPA, CA  
Andrew Foley, JD  
Carol Hansell, LLB, MBA, F.ICD  
Bill McFarland, FCPA, FCA  
Kathleen O'Neill, FCPA, FCA, ICD.D  
Hari Panday, FCPA, FCGA, ICD.D  
Bob Strachan, FCPA, FCMA, C.Dir  
John E. Walker, CPA, CA, LLB

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# Introduction

Board oversight of enterprise risk continues to be a topical issue for board deliberation and, for most boards, remains one of the top priorities.

What is the role of the board in enterprise risk management? Traditional governance models support the notion that boards cannot and should not be involved in day-to-day risk management. Rather, in their risk oversight role, directors should be able to satisfy themselves that effective risk management processes are in place and functioning effectively. The risk management system should allow management to bring to the board's attention the company's material risks and assist the board to understand and evaluate how these risks interrelate, how they may impact the enterprise, and how they are being managed. To meaningfully assess these risks, directors require experience, training and knowledge of the business.

In our view, boards must take a more active and direct role in risk assessment well beyond traditional oversight of typical risk management processes. In particular, risks associated with leadership and strategy are prime examples of areas where a board must assert itself more directly since management cannot be expected to objectively assess its own performance, capabilities, and strategy from a risk perspective. Unlike other embedded responsibilities of boards and committees (e.g., the oversight of financial reporting and disclosure), there are no standards for risk oversight and few, if any, authoritative sources on which boards may rely.

Data or cybersecurity breaches, environmental disasters, social crises, well-publicized distressed situations or even bankruptcies each year – both unforeseen and anticipated – show that absence of effective, comprehensive enterprise risk processes and models can have unexpected or even catastrophic results. High-profile disasters are often cited as extreme examples of failure of enterprise risk management systems and board oversight.

In reality though, most enterprises will never encounter significant distress. So why should management and boards focus attention on risk? The reason is that the consequences of ineffective risk management and related board oversight are the underperformance and destruction of asset or shareholder and stakeholder value. It is in this context that this document is written.

Effective risk management and board oversight should not be premised solely on risk avoidance though. Every corporation is exposed to and takes risks daily. What is important is to manage the balance of risk and reward and to identify and minimize the consequences of a negative occurrence to the extent possible.

This document is not intended to advise directors on how to create an enterprise risk management system or a technical management-led risk process; these are more suited to development by management. Our intent is to provide a practical approach to risk oversight designed specifically for boards of directors, including a framework, methodology and tool sets.

# Summary of Risk-Related Governance Issues

Click on each icon to learn about more risk-related governance issues.



## 1. Oversight



## 2. Directors' individual knowledge and understanding of risk



## 3. Board's primary objectives for enterprise risk management



## 4. Determining a corporation's tolerance and appetite for risk



## 5. Board organization and structure for addressing risk



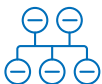
## 6. Management's approach to enterprise risk



## 7. Interrelationships and the compounding effect of risks



## 8. Strategic risk



## 9. Adequacy and timeliness of relevant information



## 10. External advice



## 11. Executive performance evaluation and compensation



## 12. Risk disclosure

## 1. Oversight



What is the board's role in the context of risk oversight? Typically, boards of directors are tasked with providing oversight for identifying, assessing and, to the extent possible, mitigating enterprise risk. It is the general view that boards are expected to oversee risk management systems and processes as well as to continuously review both the planning and outcomes of such processes.

This implies the oversight process is somewhat passive and involves significant reliance on management. But there are valid circumstances in which boards must take a leadership role in assessing risk. For example, 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 an enterprise's leadership, including the chief executive officer, can pose a major risk. How is it possible for management to assess itself?

### Questions for directors to ask

1. Does the board clearly understand its oversight mandate and role and how they contrast with management?
2. Is the board sufficiently active in fulfilling this part of its mandate?
3. Do the directors share a common, practical understanding of their responsibility for risk oversight? Is this view the same as that of the CEO and executive team?



## 2. Directors' individual knowledge and understanding of risk



If directors were to be asked whether they understand business risk, we believe most would say they do. Yet time after time, when enterprises find themselves in distressed situations and even bankruptcy, the invariable question is: “Where were the directors?”

### Questions for directors to ask

1. Do board members have an adequate, up-to-date appreciation of the nature, types and sources of risks faced by the organization?
2. Does the board truly understand how the interdependence of events or conditions occurring simultaneously can cause major value destruction?
3. Are seemingly unthinkable business risks ignored because their occurrence is thought to be unlikely?
4. Does the board have the necessary blend of business and industry knowledge and experience to assess risk?

### 3. Board's primary objectives for enterprise risk management



By conventional thinking, the primary underlying objectives of board oversight of risk are to preserve the viability of the enterprise and avoid shareholder and/or stakeholder value destruction. In reality, the likelihood of total failure for most businesses is remote.

#### Questions for directors to ask

1. Beyond the obvious objective of preserving the corporation's viability, do board members understand the most likely outcome of ineffective risk management is underperformance and the destruction of shareholder and/or stakeholder value?
2. Conversely, does the board recognize that a key objective of a robust enterprise risk oversight process should be to enhance performance and improve shareholder and/or stakeholder value?

## 4. Determining a corporation's tolerance and appetite for risk



Because every corporation constantly faces risk, management has an ongoing responsibility to evaluate risk and balance that risk with reward.

### Questions for directors to ask

1. Does the board periodically consider and quantify the corporation's capability to take on and manage risk?
2. Does the board understand the differences between risk tolerance and risk appetite?
3. Does the board consciously assess risk and reward when considering major strategic or tactical initiatives?
4. Does the board have a framework within which to make meaningful judgments around risk tolerance and risk appetite?

## 5. Board organization and structure for addressing risk



Various models of board organization are currently used for the oversight of risk. In many cases, risk assessment is delegated to one or more board committees. In other cases, the board as a whole take on the responsibility. In some cases, boards simply fail to assign this responsibility at all.

### Questions for directors to ask

1. Is the assignment of risk oversight clearly mandated?
2. Are the chair of the board and CEO committed to a dynamic and robust risk management environment?
3. If risk oversight is delegated to one or more committees, are the committees capable of overseeing risk in its broadest form?
4. Is sufficient time set aside to carry out this responsibility?
5. Do the board's agendas promote integration of risk issues with other agenda items such as strategy, organization and finance?

## 6. Management's approach to enterprise risk



Management approach to risk can vary widely. At one extreme are highly structured enterprise risk management processes with dedicated organizational resources. At the other extreme are more unsophisticated and passive approaches that address risk as an afterthought, usually regarding major expenditures, or through a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis.

### Questions for directors to ask

1. Does management have a robust framework and comprehension process to assess risk? Does the board accept management's assessment of risk too readily even when it appears superficial?
2. Are risk management processes or systems well designed to manage risk holistically and not in silos?
3. Does the enterprise have adequate systems and processes in place to monitor the effectiveness of risk management?
4. Do the board and management learn from and act on instances where risk management strategies and systems have been ineffective?
5. Can management adequately and objectively assess risk when it is itself the architect of the risk management framework?
6. Does management have the openness and humility to recognize its shortcomings and the courage to recognize flawed strategy and change course?

## 7. Interrelationships and the compounding effect of risks



Company failures, much like air disasters, usually result from many factors occurring simultaneously. In hindsight, the origins of these unfortunate and often disastrous events are painfully apparent. In today's fast moving, complex environment, boards need to recognize and deal with multiple risk scenarios that may occur at the same time.

### Questions for directors to ask

1. Does management understand the interconnectivity and interdependencies of risks?
2. Does the board recognize the enterprise may have several embedded exposures such that even relatively minor risks can produce significant unfavourable consequences?
3. Are risk interrelationships ignored because the likelihood of a negative occurrence is deemed remote?
4. Does the board have an adequate framework to understand the interrelationships, interdependencies and compounding effect of risks?

## 8. 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 virtually every strategic plan.

### Questions for directors to ask

1. Does the board understand and discuss the linkages between strategy and risk?
2. Does the board assess strategic plans in terms of formulation flaws and capability to execute?
3. Does the board integrate assessment of risk and choices about risk into strategic plans?
4. Does the board have a framework and toolsets (e.g., competitive analysis and stress test modelling) to assist it to understand the consequences of strategic risk?

## 9. Adequacy and timeliness of relevant information



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

### Questions for directors to ask

1. Beyond risk-related strategic plan supplements and financial reporting data, do boards receive comprehensive reports on risk?
2. Is this information sufficient to make well-reasoned judgments about risk and risk management?



## 10. External advice



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

### Questions for directors to ask

1. Are there reputable experts to advise the board on various risk matters?
2. Does the board regularly engage such experts?

## 11. Executive performance evaluation and compensation



Boards evaluate executives using a variety of metrics and other criteria. Compensation philosophy and evaluation criteria are typically designed to align the executives' objectives with the corporation's goals.

### Questions for directors to ask

1. Does the board include risk management as a criterion for executive evaluation?
2. Are current compensation practices aligned or at odds with prudent risk management?

## 12. Risk disclosure



Publicly listed companies are required to disclose the primary risks of the business at least annually.

### Questions for directors to ask

1. Does the board contrast the risk disclosures made in the company's public documents with the prioritized and interconnected risks identified through the use of an oversight framework?
2. Does the enterprise's risk disclosure over emphasize external risk and minimize the potential for self-inflicted exposures?

# A Board Risk Oversight Framework

A common concern among boards of directors is the lack of a comprehensive framework and toolsets to assist boards to structure an effective, robust enterprise risk oversight process. The board's responsibility for risk oversight and management's responsibility for enterprise risk management should be clearly delineated.

This document defines a framework and a systematic approach incorporating elements of a traditional enterprise risk management process but is tailored to the board's oversight role. Before reviewing this *Framework*, it may be helpful to contrast enterprise risk from management's perspective versus the board's oversight role.

## Enterprise risk management

Enterprise risk management (ERM) is a management tool that encompasses the methods and processes used by organizations to manage risks related to the achievement of their objectives and protection of value. A typical ERM framework guides management on how to:

- identify particular adverse events or circumstances relevant to the organization's performance and assets
- assess the magnitude and likelihood of impact
- determine a mitigation or response strategy
- monitor exposures

By identifying and proactively addressing risks, enterprises can improve performance and protect and create value for stakeholders.

ERM may also be described as a risk-based approach to enterprise management that integrates strategic planning, operational, organizational and financial 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 and how these risks are appropriately managed.

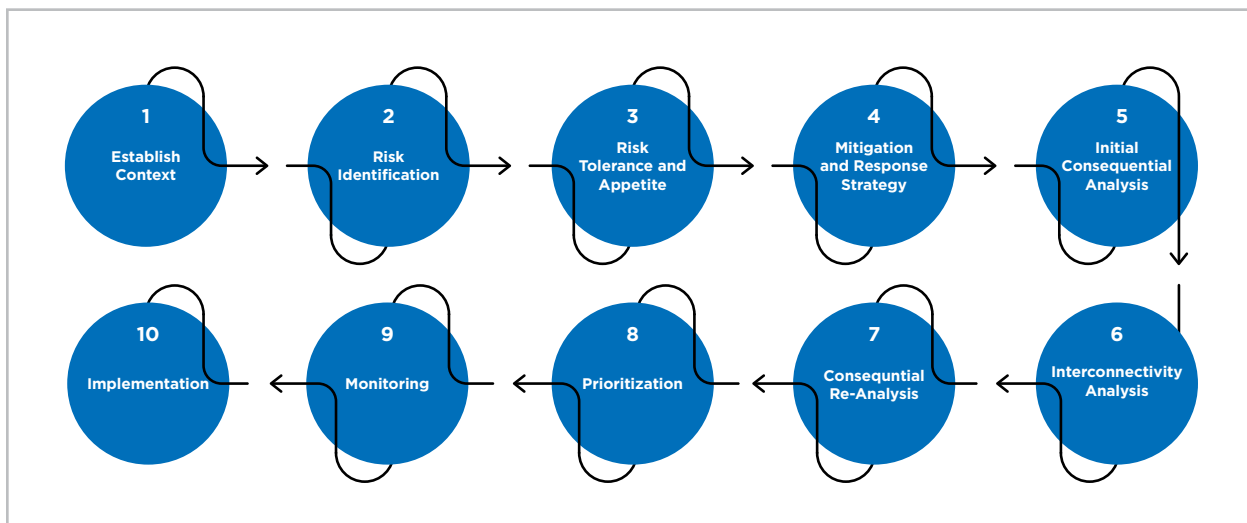
## Board oversight of risk

The board's role in risk oversight is similar in some ways to the role of the audit committee. The audit committee does not prepare financial statements, draft disclosures, or maintain the system of internal control. Rather, the audit committee bears responsibility for overseeing the financial reporting and related internal 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 and continuously review the associated outcomes and planning. However, as stated earlier in this document (and worthy of repetition), the oversight role should be neither passive nor too reliant on management.

Successful board risk oversight processes require board confidence in management, access to relevant and reliable information and effective functioning of a board overall.

### MODEL FOR BOARD INVOLVEMENT IN RISK OVERSIGHT



The participants who contribute to this model's effective functioning may vary among organizations. In larger organizations, this group usually includes:

- the board of directors
- the executive organization
- operational and functional staff
- risk and compliance management, including internal audit and legal counsel
- external advisers, such as external audit, legal firms, and consultants
- other stakeholders, such as lenders and investors, in certain cases

In smaller organizations, many activities could be combined and assigned to executives and senior managers or outsourced.

Clearly, the executive organization led by the chief executive officer bears overall accountability for managing enterprise risk. The board of directors has responsibility for oversight and is ultimately accountable for the corporation's overall performance and the safeguarding of its assets. Within the risk management framework, the board also would be expected to provide varying degrees of input and counsel into:

- risk identification
- analysis and validation
- prioritization
- risk tolerance and risk appetite
- mitigation and response strategies
- monitoring activities

As referenced earlier, boards should take a more active role in overseeing certain specific types of risk. Depending on the degree of the risk, the degree of board involvement would be at one of three levels.

## Three levels of risk

### Level 1 risks

Level 1 risks include customary operational-type risks (e.g., health, safety and environment and facility or system disruption) and other risks where the potential adverse effect on the business would be moderate or has already been offloaded through an insurance program or by other means.

Provided the board is satisfied with the efficacy of the risk management systems and processes, board oversight for Level 1 risks would involve customary questioning, review of periodic reporting, counselling and monitoring.

### Level 2 risks

Board involvement in risk oversight would be heightened for Level 2 Risks, which fall into two categories:

- high-impact risks that cannot be adequately mitigated
- risks involving the presence of management bias

For high-impact Level 2 risks, the board would work closely with the executive organization to understand, quantify, prioritize, mitigate and monitor such risks. For example, financing risk falls within this category where the enterprise has significant liquidity exposure by virtue of its business model, capital structure, or the potential balance sheet impact of another adverse occurrence.

For Level 2 risks involving potential management bias, board involvement would expand to fully understand the underlying facts and assumptions and how the risk might be quantified, validated, monitored and stress-tested through financial modelling. For example, strategic risk would fall into this category since management developed and was committed to execute the strategy and would have difficulty objectively assessing its viability and associated risks.

Increasing board involvement does not imply that the board takes the lead to the exclusion of management. Rather, this should be a highly collaborative effort between the board, the CEO and the executive organization.



### Level 3 risks

Because Level 3 risks include instances where management is clearly conflicted or heavily biased, these risks should command the highest level of board involvement. The obvious and arguably most important example of Level 3 risk lies in assessing the CEO's performance, capability, and suitability. Clearly, this is a critical responsibility for which the board must take a leadership role.



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 own ability to execute? Similarly, the quality and effectiveness of a corporation's leadership – including its chief executive officer – can pose a major risk. Is it fair or even possible for management to assess itself?



# Preparing to Implement the Framework

## Overview

Given the unique circumstances of each enterprise and its board of directors, there is no single implementation model. Each board must determine its own appropriate execution methodology.



**The highest-quality strategic plans are unlikely to succeed if they are not effectively implemented. Thus, the ultimate success or failure of employing this risk oversight framework may lie in its execution.**

In its early stages, executing risk oversight may be unknown territory for many boards. Accordingly, they should be prepared to modify the model as the implementation unfolds. As with other important board processes, the full implementation of a comprehensive board oversight methodology may require several cycles over two or three years. Success will depend on committed leadership, planning and direct involvement by both the board and senior management.

### 1. Leadership

Unquestionably, the success of the board oversight of risk is directly tied to the leadership of the process. While it is tempting to assign the leadership of risk oversight to a committee chair, without the support and sponsorship of the board's chair and the chief executive officer, the process is unlikely to become broadly accepted or embedded in the board's annual agenda. It is equally important for the CEO to recognize and support the board in fulfilling its responsibility to assess organizational risk at the chief executive level and critically assess management's strategy from a risk perspective.

## 2. Direct board involvement

The board's risk oversight must be hands-on. It should be much less about reviewing management presentations and more about drawing on the full board's capabilities and experience through thoughtful discussion and interaction. The time commitment by both board and management will be significant. The board and CEO must show committed leadership to overcome management resistance to the process due to the amount of time required.

## 3. Board versus committee risk oversight

Each board must determine how it wishes to assign responsibility for overseeing enterprise risk. Some may wish to delegate all or part of the responsibility to one or more existing committees or to a new, separate committee. Certain risks clearly lend themselves to committee oversight (e.g., financial and organizational risks). However, as with the oversight of strategy, the entire board is ultimately responsible for overseeing risk and would benefit from drawing on the board's full resources. This is discussed more fully in [Section 10. Implementation](#), below.

## 4. Separate sessions

Because of their importance and time requirements, most boards regularly schedule separate meetings to review the corporation's strategic plan. For the same reasons, boards should consider dedicated sessions to address enterprise risk (particularly in the first year or two) to work through inevitable implementation issues. It is worthwhile to schedule risk sessions following the strategic plan meeting to allow board members to reflect on strategic risk while it is top of mind.

## 5. Session planning

The board and management may find it helpful to scope the risk sessions in advance and to understand the data and analytical requirements. This process likely will be iterative since risk oversight remains somewhat uncharted territory. The board and management may find it worthwhile to work through each of the nine process steps set out in [Section 2. Risk identification](#), below, to determine the desired outcome and input requirements. At the end of each session, the board should review any gaps in the data or process to better prepare for future meetings.



## 6. Role and use of advisers and stakeholders

In this document, we often refer to the role of external advisers and consultants as providers of specific expertise or unbiased analysis and advice. For small and mid-sized companies, extensive use of advisers may be unaffordable. Boards of such companies are encouraged to explore creative ways to obtain expert advice within cost constraints..

In some instances, gathering input from stakeholders is highly advisable. Specifically, when examining the enterprise's capital structure from a risk perspective, it might be useful to obtain the views of the company's lenders and investment bank. Similarly, when determining risk tolerance and risk appetite as discussed in [Section 12. Risk disclosure](#) it would be useful to understand shareholder sentiment and related investment thesis in connection with risk.

## 7. Role of management

The chief executive officer's support is critical to implementing the risk oversight framework. The staff members involved in risk management (e.g., risk officers and internal auditors) are equally important, and their knowledge, expertise, independence and resources can be invaluable in assisting the board in developing objective analysis and providing useful insights.

## 8. Risk parameters

When boards consider enterprise risk in light of much-publicized bankruptcies or near-bankruptcies, they commonly focus on catastrophic risks that could threaten the corporation's viability. This focus is clearly warranted: Most businesses do survive. For corporations that have strong balance sheets and solid track records, however, boards may be tempted to reduce their emphasis on risk oversight. We assert that risk parameters should go beyond merely identifying risks that endanger the corporation's sustainability; the risk parameters should include any event or condition that could materially affect long-term performance or cause material destruction of asset or shareholder value.

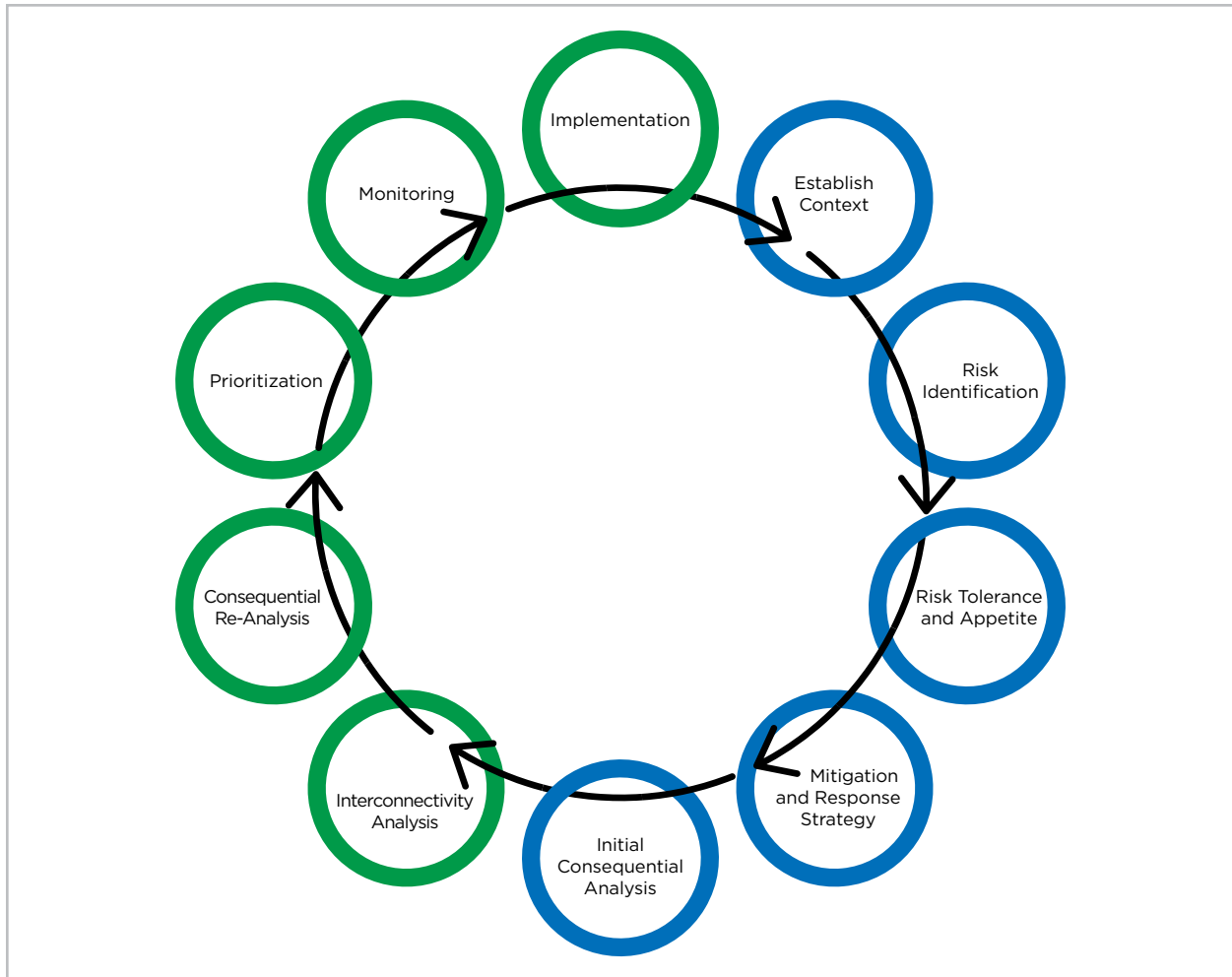
**The combination of a robust board-led risk oversight process and the establishment of appropriate risk parameters to include potential occurrences that could affect long term performance or cause the destruction of asset or shareholder value has the tangential benefit of improved company performance and board governance practices across the critical corporate functions.**

# The Framework

Below we set out a risk oversight framework specifically tailored for use by boards of directors. The ten-step process is designed to help boards better identify, understand and address critical risks. Most importantly, the framework includes a process for understanding the interconnectivity of risks and the potential compounding effect of unfavourable events occurring simultaneously. The framework may also assist boards to better understand their enterprises' tolerance and appetite for risk in planned and unplanned activities and events, and guide development of their response or mitigation strategy.

The following model for board involvement in risk oversight will assist boards of directors to understand current conditions in which the organization operates from an internal, external and risk management perspective.

## MODEL FOR BOARD INVOLVEMENT IN RISK OVERSIGHT



## 1. Establish context

### Examine current conditions

Fundamental to gaining a broad understanding of the risk environment is examining the current conditions in which the enterprise operates. At a minimum, this includes an appreciation of the:

- macroeconomic environment
- geopolitical risks
- ESG risks
- size, nature and unique characteristics of the industry, geographic markets and customers
- fragmentation, relative size, and strengths of competitors
- technology, data, cybersecurity risks
- basis of competition

It is helpful for the board to receive from management comprehensive industry analyses that provide current industry-specific data and detailed competitive information, especially data related to the business's key drivers. Boards also should recognize that subtle changes in the industry or competitive environment might signal the emergence of important trends that can create significant risk.

**Generally, boards of directors gain a contextual understanding of the conditions in which the corporation operates through their ongoing oversight activities. However, in rapidly changing industries, up-to-date and thorough market and competitive analyses should not be underestimated.**

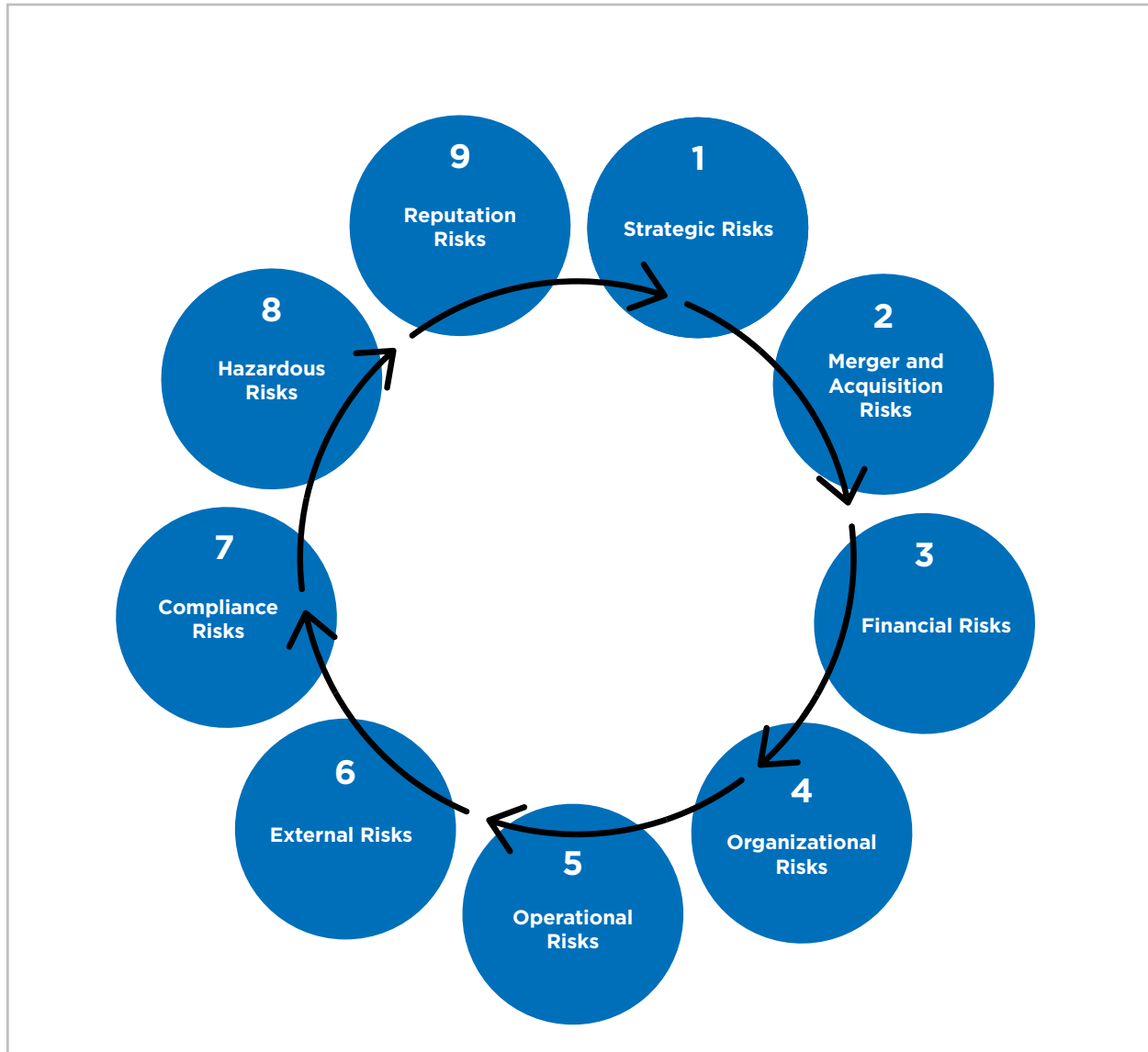


## 2. Risk identification

Identifying and categorizing risks that may materially affect the enterprise's performance, asset values or viability 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. The risk identification framework below shows nine risk categories.

### RISK IDENTIFICATION FRAMEWORK



Too often the risk identification process focuses on external risks (e.g., natural disasters, potential actions of competition and environmental issues). Ironically, the most significant risks frequently lie internally. Internal risk identification requires an alert, unbiased board and to the degree possible, an objective executive team.

#### TYPES OF RISK

Strategic Risks	Financial Risks	Organizational Risks
<ul style="list-style-type: none"> <li>unpredictable market trends and performance</li> <li>invalid assumptions</li> <li>selection of ineffective strategies</li> <li>inability to execute</li> <li>acquisitions</li> </ul>	<ul style="list-style-type: none"> <li>liquidity</li> <li>capital availability</li> <li>capital structure</li> </ul>	<ul style="list-style-type: none"> <li>leadership depth and quality</li> <li>talent retention</li> <li>cultural alignment</li> <li>diversity, equity, inclusion</li> </ul>
Operational Risks	External Risks	Hazardous Risks
<ul style="list-style-type: none"> <li>customer dissatisfaction</li> <li>product failure</li> <li>service quality</li> <li>capacity constraints</li> <li>vendor and distribution dependencies</li> <li>input quality and pricing</li> <li>IT disruption / cybersecurity breach</li> </ul>	<ul style="list-style-type: none"> <li>competitive actions</li> <li>macroeconomic volatility</li> <li>industry structural change</li> <li>industry cyclical</li> <li>interest rate increases</li> </ul>	<ul style="list-style-type: none"> <li>liability torts</li> <li>property damage</li> <li>natural catastrophe</li> <li>environmental</li> </ul>
Compliance Risks		
<ul style="list-style-type: none"> <li>compliance with applicable laws and regulations</li> </ul>		

## 2.1 Strategic risks

### Overview: Board oversight of strategy

Strategic risk is any exposure associated with the formulation or execution of an enterprise strategy designed to achieve specific objectives.

The primary risks associated with strategy stem from the selection of strategies inappropriate in the circumstances, beyond the enterprise's ability to execute, or untimely. Poor strategy formulation or execution can, at best, cause underperformance and, at worst, potentially threaten the viability of the enterprise.

Set out below are three typical strategic risks including those exposures caused by insufficient governance at the board level.

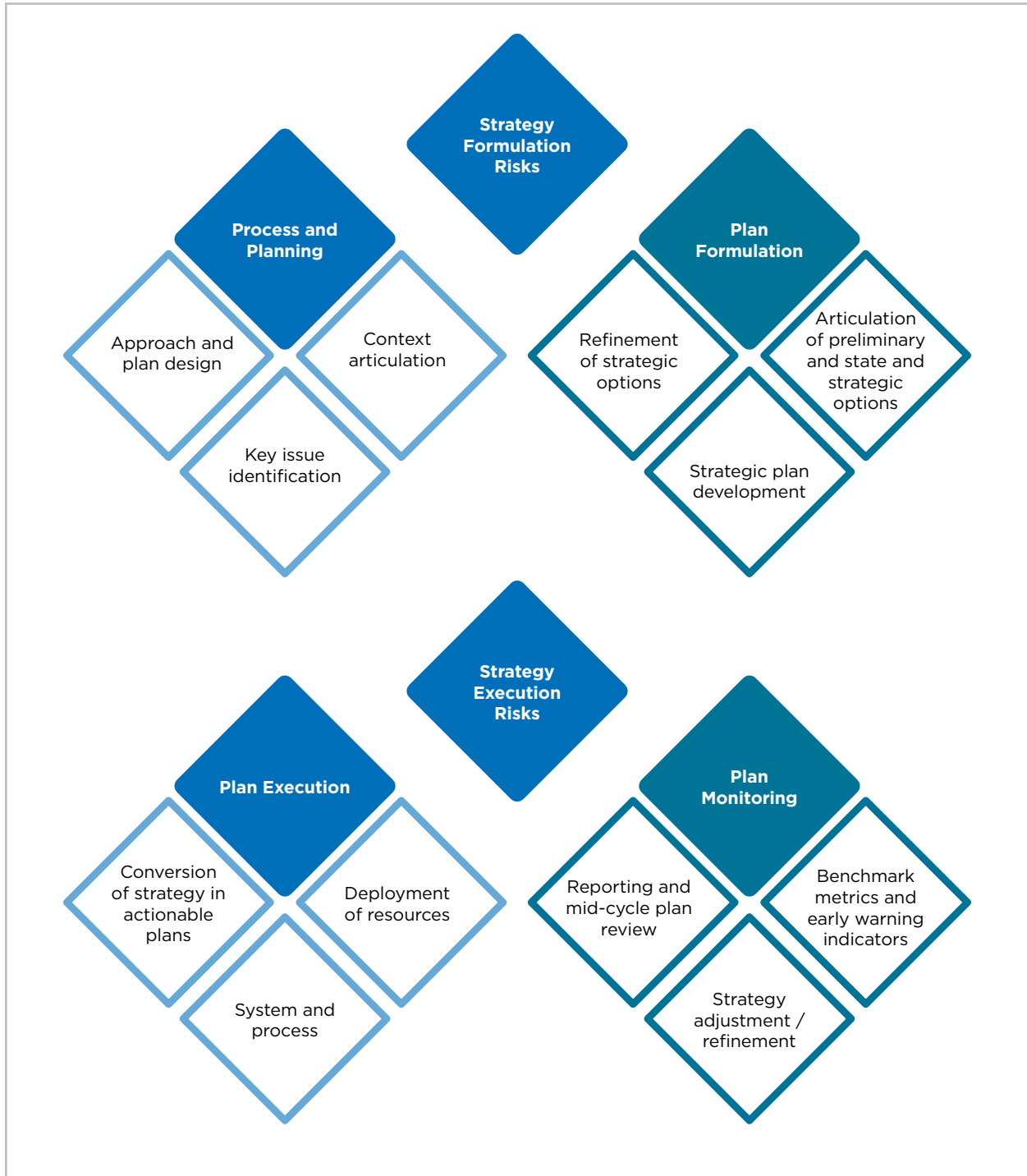
### THREE TYPICAL STRATEGIC RISKS

1. Strategy Formulation Risks	2. Strategy Execution Risks	3. Board Oversight Risks
<ul style="list-style-type: none"> <li>• flawed or incomplete process for strategy development</li> <li>• incomplete fact base – data and analytics</li> <li>• failure to examine trends, influencing factors</li> <li>• failure to address key issues</li> <li>• assumptions and assessments that are too favourable or unjustified</li> <li>• not based on critical success factors</li> <li>• failure to consider vulnerabilities</li> <li>• poor plan design</li> <li>• realism of end state and objectives</li> <li>• lack of quantification of objectives</li> <li>• incomplete or flawed strategy</li> </ul>	<ul style="list-style-type: none"> <li>• incomplete initiatives to convert strategy into action</li> <li>• too little talent in key areas</li> <li>• ineffective leadership</li> <li>• insufficient capital or assets</li> <li>• failure to benchmark competition and establish relevant metrics</li> <li>• measuring the wrong things</li> <li>• failure to undertake root cause analysis</li> <li>• failure to review plans for relevance as performance or conditions change</li> <li>• failure to modify plans in a timely manner</li> </ul>	<ul style="list-style-type: none"> <li>• lack of involvement</li> <li>• focus on formulation not on execution</li> <li>• acceptance of flawed or incomplete plans</li> <li>• failure to establish clear cascading accountabilities</li> </ul>



CPA Canada’s publication [Overseeing Strategy: A Framework for Boards of Directors](#) contains a model for strategy development and execution. This model is shown below with an overlay showing areas of formulation and execution risk.

**MODEL FOR STRATEGY DEVELOPMENT AND EXECUTION**



### Strategy formulation risks

Fundamentally a strategic plan is designed to create value for its stakeholders. For commercial enterprises, value creation is fairly simple to define – the increase in the value of the business most often tied to growth of revenue, earnings and cash flow.

### Process and planning

Before the strategic planning process is undertaken, it is important that the board and management address three important areas:

1. What will be the overall approach to plan design?
2. What is the context in which the plan is being developed and what are the related key issues?
3. What information and analysis are required to form the underlying baseline for the plan?

### Approach and plan design

At the outset, there are three questions the board and management should address when designing a plan:

- What is the appropriate duration of the planning period?
- How is value creation defined?
- What should be the format and content of the strategic plan?

Typically, strategic plans have a duration of three to five years, with more recent experience trending toward three years. The most important factors in selecting the plan duration are the dynamics and predictability of the market and competitive landscape, the duration of commitments and the importance of long-range thinking. Plans with short durations can become too tactically focused – merely extensions of annual plans. For enterprises that require long-term investments that could span five or more years, then longer-range plans are appropriate.

Fundamentally a strategic plan is designed to create value for its stakeholders. For commercial enterprises, value creation is fairly simple to define – the increase in the value of the business is most often tied to growth of revenue, earnings, and cash flow. For not-for-profit enterprises often having multiple stakeholders often having different interests, defining value creation is much more complex and often involves making choices.

One important exposure arises if the fundamental design of the plan is flawed. At a very early stage, management and the board should agree on the format and the expected content of the plan document. It is incumbent on management to share with the board a draft of a plan outline for discussion and input. This avoids potential disconnects when the final plan is delivered. A suggested long-range plan format is in [Plan Formulation](#) on page 35.

### *Context and key issues*

Contextually, it is important for the board to briefly examine the enterprise's past performance: What were the successes? What were the shortfalls? What were the trends and influencing factors on the enterprise and the industry it serves? Similarly, understanding the current environment is useful. What are the current macroeconomic and political/regulatory conditions? What is the state of the industry? How are conditions likely to change?



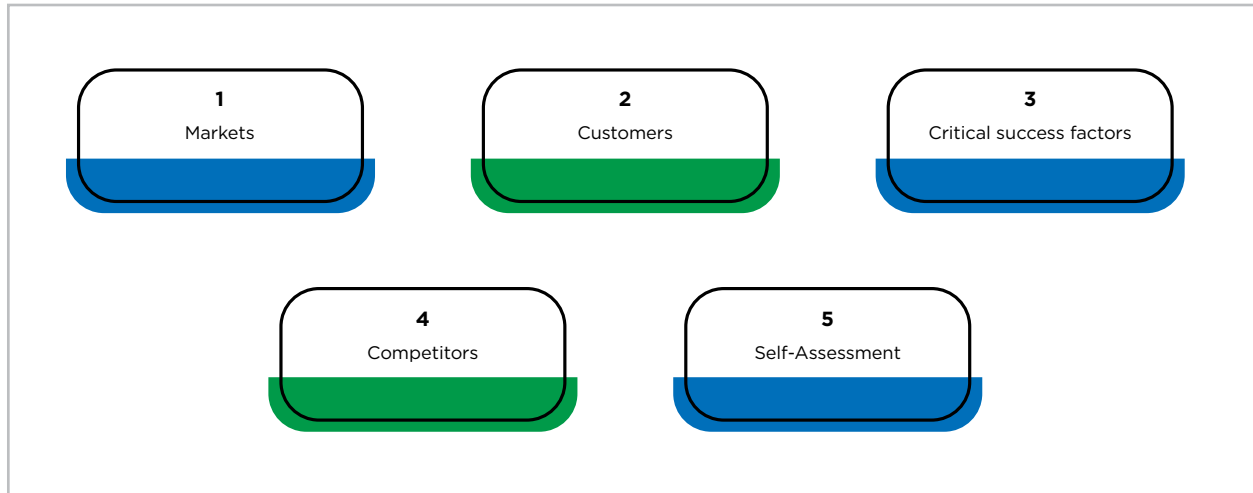
Separately, the CEO should provide the board with the key internal and external issues facing the organization. All should be addressed one way or another in the strategic plan.



**While the past may not be indicative of the future, board examination of historical performance is useful to calibrate the aggressiveness of the proposed strategy and its underlying assumptions. The board should be well-grounded on the baseline and facts upon which the plan is to be built.**

### Information and analyses

There are five groupings of information and analyses that should be developed as a base data set upon which the strategic plan is built.



As a minimum, market data should include:

- market size
- market segmentation
- addressable and non-addressable segments
- market trajectory
- influencing factors
- barriers to entry

The single most important piece of customer information is to determine what customers actually want ranked in order of importance. Its value can hardly be over-estimated. As simple as this may sound, it is surprising how many organizations do not have reliable data on this subject. In fact, many rely on anecdotal information usually gathered by the sales organization.

Perhaps the most important informational requirements relate to critical success factors. They are the drivers of the business – fundamental activities an enterprise must excel at to deliver superior performance. There are seldom more than 10 factors. If improperly developed, these could create strategy formulation risk. Such factors are not capabilities or resources; those will be covered later under Execution Risk.

The fundamental questions to answer are: “If a new competitor were formed today, what would it have to do better than anyone else to be successful in the industry? And, if we are to be competitively better on each factor, would we be the top performer?” If the answer to the second question is not resoundingly affirmative, the critical success factor list would be incomplete. As an example, a critically important factor for success in the advanced technology sector is to maintain market-driven technology leadership through developing and consistently executing on leading product and technology road maps.

The critical success factors should form the basis of strategy (i.e., for each success factor the strategic plan should contain a strategy).

Competitor background information is very important. This would include:

- relative size
- market position and share
- performance against critical success factors
- competitive advantages
- capabilities and resources
- vulnerabilities
- relative valuation

The same captions set out above for the competition should be used for self-assessment information. Directors should be aware of bias: Do not underestimate competitor performance and capabilities or overestimate one's own.

Many organizations use SWOT analyses. Such analysis has little value unless directly related to the critical success factors and is as objective as practical.



### *Governance considerations*

Contrasting typical board oversight of risk relating to financial reporting versus oversight of risk inherent in strategy highlights the need for increased board focus on assessing strategic risk. While accurate financial reporting is crucial 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 astounding.

Virtually all public companies maintain substantial systems, processes, professionally trained resources, regulations, validation and oversight to ensure their financial reporting is accurate. Financial reporting has well-defined rules and parameters, often known as generally accepted accounting principles. These principles are interpreted and modified by extensive resources within the public accounting profession along with regulatory bodies such as securities commissions.

Stock exchanges require annual financial statements to be audited by qualified, independent accounting firms and securities regulators. Some stock exchanges also require the independent audit of the systems of internal control. 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 board's audit committee.

Audit committees are mandated to have qualified independent directors who appoint and supervise external and internal audit and review annual and quarterly financial statements and 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. Most boards need better processes and tools to assist in the oversight of strategy, particularly in the area of strategic risk.

At the risk of being controversial and overly general, we assert that few companies produce comprehensive, fact-based strategic plans. Most are riddled with anecdotal data that cannot be verified. Many contain bold statements about leadership and the level of competitiveness without hard facts to back up such claims.

Strategy development is not an exact science by any means. Nevertheless, it is undeniable that having relevant facts to formulate strategy is critically important. There are however instances when strategy itself may be counter-intuitive, innovative or even speculative. For example, would the vast array of products developed by Apple be conceived if the leaders of that company had focused only known customer preferences? Even still, it is undeniable that having relevant facts before formulating strategy is critical.



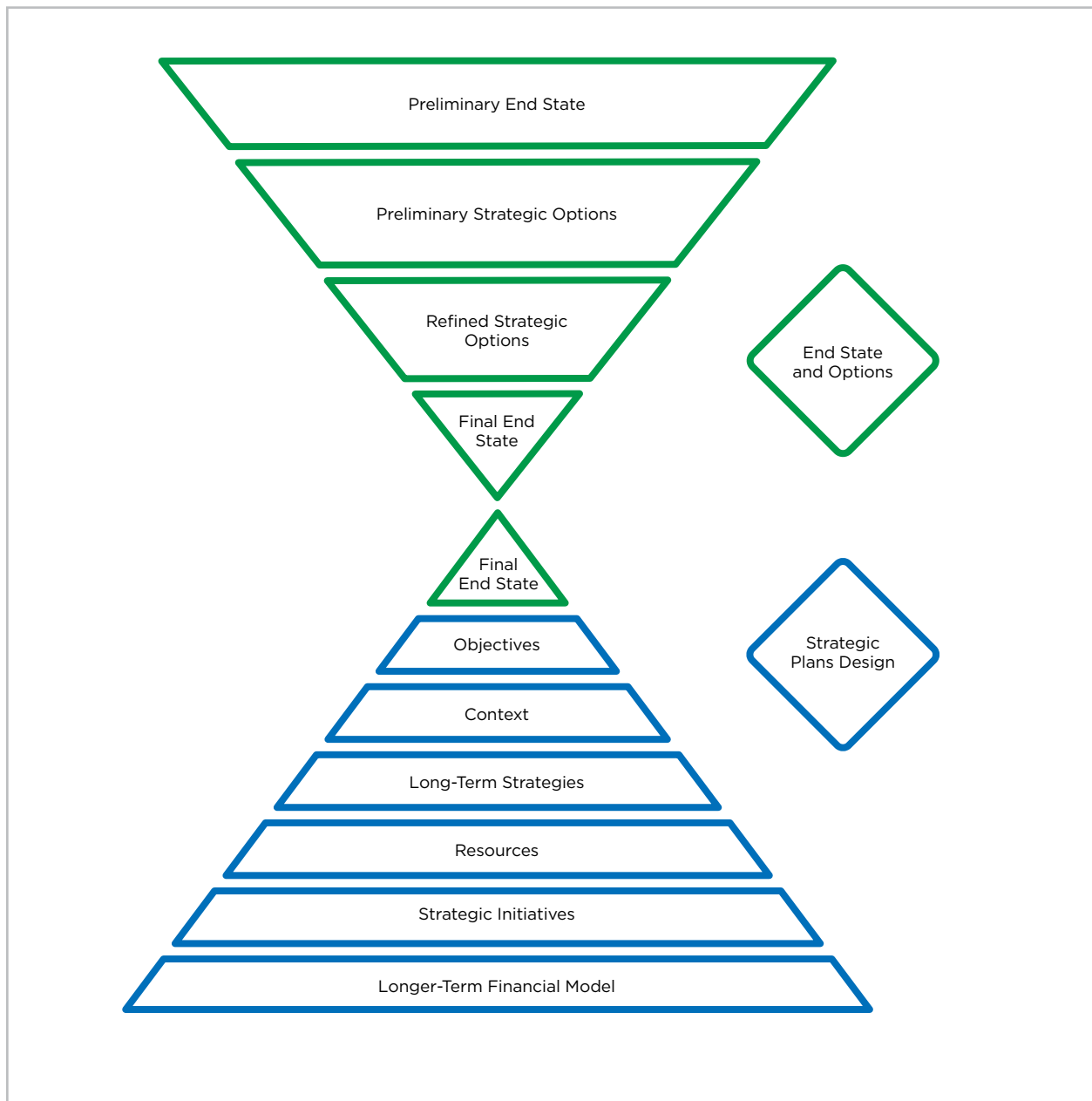
### Plan formulation

One of the major risks of strategic planning is that of omitting key factors. A flawed strategy is the likely outcome of failure to adopt a comprehensive model for strategic planning.

Because there are no standard formats or content, boards generally receive plans designed by the executive organization, often with significant gaps in organization and content.

Set out below is a model for strategic plan development. Please refer to the CPA Canada publication, [Overseeing Strategy: A framework for boards of directors](#), for more detail.

### MODEL FOR STRATEGIC PLAN DEVELOPMENT





### *Preliminary end state and strategic options*

The end state should be a clear description of what the enterprise should look like at the end of the planning period. Some organizations typically include vision, mission, and core-value statements. Our preference is for a more tangible and realistic view of the enterprise at the end of the planning period. Where enterprises have alternative paths to consider (e.g., making a major acquisition), it is helpful at the outset to consider strategic options and examine alternative end states.

### *Strategic plan (design) development*

The strategic plan framework as shown above is designed to address these eight sets of questions:

1. What should the enterprise look like at the end of the planning period (final end state)?  
Is this end state realistic?
2. How does that end state compare with the current situation (i.e., filling in the difference is the objective of the strategic plan)?
3. In what context is the enterprise likely to be operating during the planning period?
4. Are the underlying assumptions reasonable?
5. What does the enterprise need to do to achieve the end state (strategies)? Do such strategies fully address the critical success factors? How do they leverage the enterprise's resources? Are they designed to minimize the enterprise's vulnerabilities? How are the overarching strategies integrated into each functional area?
6. What resources (people, assets, capital) will be required? What does the enterprise currently have? What resources are required? What is the plan to obtain these additional resources?
7. What specific initiatives are required to convert strategy into actions? How are they to be measured and monitored?
8. What is the expected longer-term financial performance?

**The board can play an important role in determining that the objectives are sufficiently long-term, realistic and will deliver value. It must be satisfied that the strategies are sound, will achieve the objectives and are within the corporation's tolerance for risk.**

## Strategic execution risks

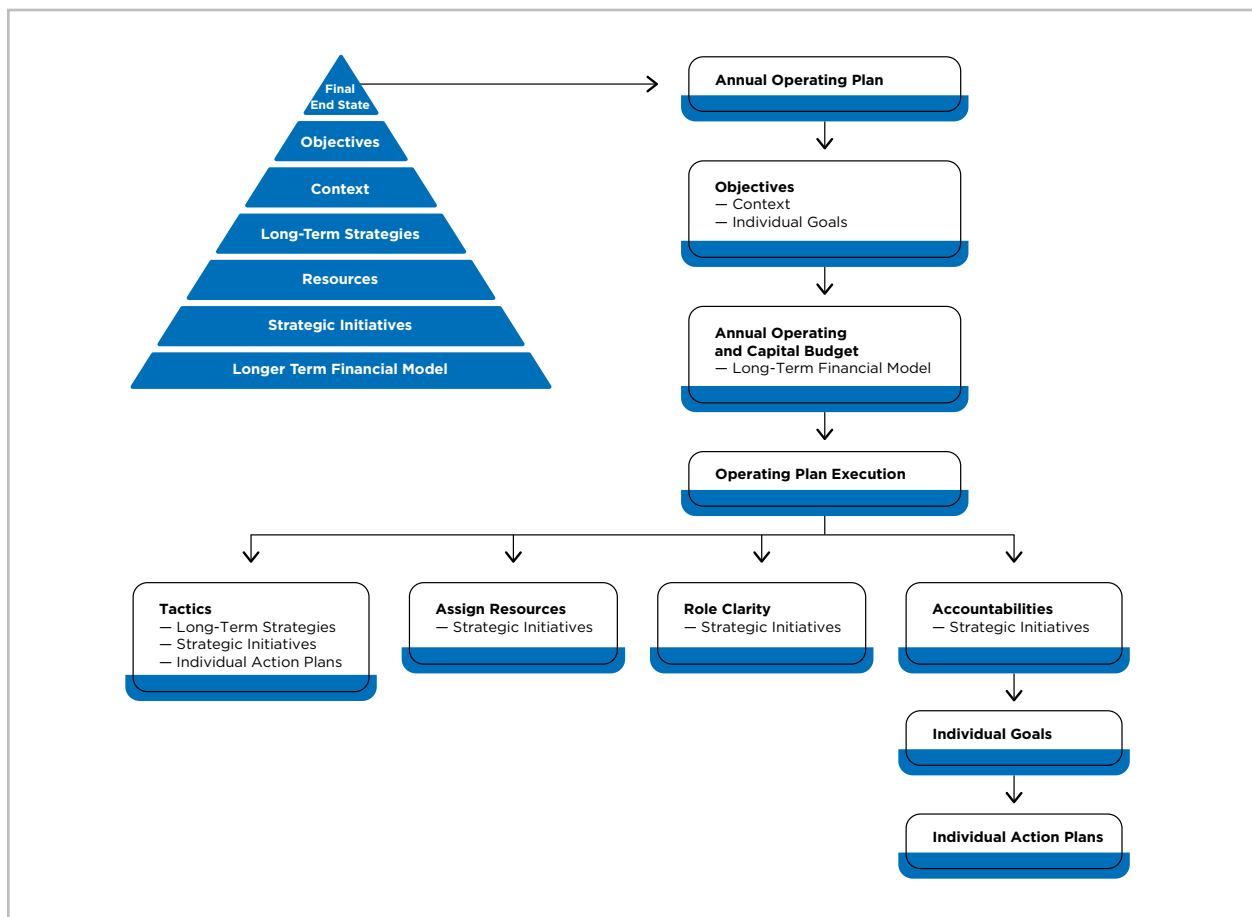
### Plan execution

Boards spend the majority of their time allocated to strategy on understanding, probing, and assessing strategy formulation. Yet there is a higher correlation of failure from execution than from strategy formulation flaws.

### Conversion of strategy into actionable plans

The conversion of strategy into action is where the realism of the strategy is tested. Failure to utilize an effective execution model as set out below poses serious risk.

## STRATEGY EXECUTION MODEL



The model shown above has direct linkage from the strategic plan to the annual operating plan. The longer-term objectives are converted into annual objectives and strategies are turned into annual tactics and initiatives. Those objectives and tactics are then converted into individual goals and action plans for which each employee is held accountable.

**While planning is crucial, execution is all about people – how they are organized and coordinated, how roles and accountabilities are assigned, how information flows and how systems, tools and other resources are put to use.**

### *Deployment of resources*

Deployment of resources relates to people, capital and assets. Insufficient resources or failure to deploy them effectively creates executional risk.

Sufficiency of people entails quantity and quality of leadership, competencies, talent depth as well as an effective organizational structure, defined accountabilities, culture and alignment and at an affordable cost.

Sufficiency of capital is the quantum. This calculation takes into consideration the structure and cost of debt and equity as well as the sources and availability of additional capital.

Sufficiency of assets relates to both physical assets (e.g., land, buildings and equipment) and intangible assets (e.g., intellectual property, know how, brands, image and reputation).

### *Systems and processes*

The inadequacy of the systems and processes required for effective strategy execution can be a significant risk. Such systems generally include measurement and reporting, project management, performance management and compensation / recognition. Such systems must be aligned and integrated so that initiatives can be properly defined, staffed and performance measured. Similarly, individual accountabilities, measurement and reward systems must be defined, aligned and effective.

**No battle plan survives contact with the enemy.**

**Execution risk is difficult to assess in advance of implementation because there are so many uncontrollable variables that inevitably occur when strategy is implemented. Close monitoring of post-implementation and performance analytics is key to assessing execution success.**

## Plan monitoring

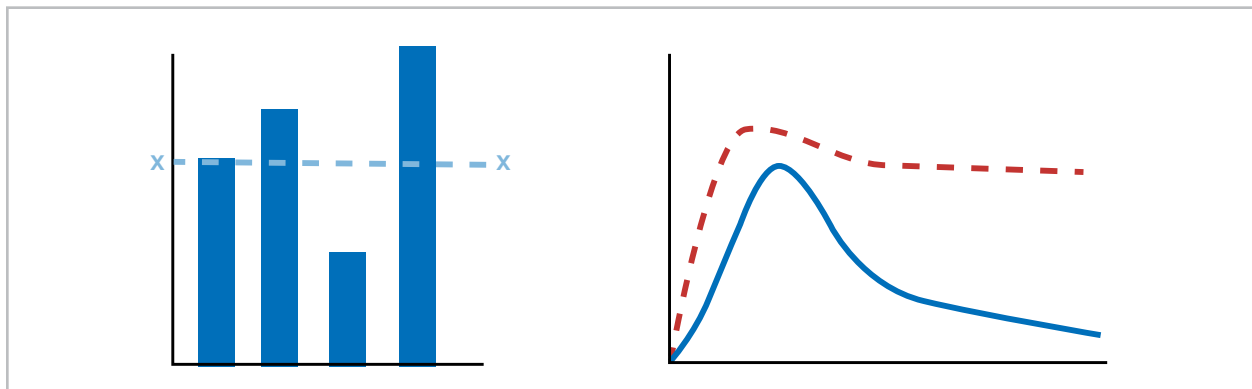
### Benchmark metrics and early warning indicators

Failure to properly monitor and analyze results poses a serious execution risk.

Monitoring involves both conventional passive measurements (including financial data) as well as a set of early warning indicators that often measure strategic-initiative milestone achievement and executive performance against their annual objectives. Comprehensive root cause analysis of variances from performance targets done well should be able to pinpoint and differentiate among:

- flawed strategy
- invalid assumptions
- too aggressive targets
- ineffective execution
- changed external conditions including competitor actions

For more detail, see [Section 9. Monitoring](#), below.



### Mid-cycle plan reviews and plan modification

Because strategic plans have a short shelf life, an ingrained, formal periodic mid-cycle review and modification process is needed to maintain strategy relevance. Depending upon the industry and enterprise dynamics, such reviews should be carried out every 18 months or even annually. The outcome of such review should not only assess performance but also whether the plan needs changing or whether a new plan should be developed. Typically, reviews would include:

- the original plan overview
- reassessment of assumptions
- competition updates
- strategic initiative
- financial performance

The consequences of not rewriting a strategic plan when required is worse than having no plan at all because following an outdated strategy is self-fulfilling. Conversely, requesting management to do a complete rewrite, when only an update is required, can be a major distraction and divert management time away from more pressing items.

### **Tools and processes to help boards oversee strategic risk**

Several tools are set out in this document to assist boards in carrying out their oversight role. These toolsets are not intended to be used by boards to the exclusion of management. In cases where external expertise is engaged, the board should always have full access to reports and in-person presentations.



### ***Questions to consider***

1. Has the enterprise adopted a robust and practical model for strategy formulation?
2. Have the assumptions been adequately considered and stress tested?
3. Has the enterprise adequately assessed and benchmarked its capabilities, assets and capital, performance, and strategy against relevant benchmark organizations?
4. Has the enterprise developed an end-state description?
5. Have objectives been quantified and do they represent the difference between the end state and the current situation?
6. Have key success factors been articulated?

7. Are the strategies directly linked to key success factors? Have the strategies adequately considered strengths and vulnerabilities?
8. Are the strategies realistic?
9. If executed effectively, will they achieve the objectives?
10. Does the stress-tested long-term financial model confirm positive cash flow through the planning period?
11. Does the enterprise have a robust model for strategy execution?
12. Does the enterprise have the leadership, depth of talent, required competencies, assets and capital available to execute the strategy within the plan period?
13. Does the enterprise have the right organizational structure, leadership, management, staff and accountability model and systems and to successfully execute the strategic initiatives?
14. Does the enterprise have an adequate set of metrics that measures strategic performance including leading indicators?
15. Does the enterprise perform a periodic analysis of results to identify formulation versus execution flaws?
16. Does the enterprise's reporting include corrective actions when there is a shortfall to plan?
17. Does the enterprise modify its plan when conditions or performance change?

### 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 can the board know when the enterprise is losing competitive advantage and when changes are required?

A useful way to assess strategy (and associated risk) is to engage an external firm to conduct periodic customer interviews. While many companies have institutionalized customer satisfaction surveys, such surveys tend to provide inconclusive information for several reasons:

- design of the questions
- response bias
- number and type of respondents
- lack of competitive comparisons

For example, a superior customer insight model could involve the use of an outside firm (usually a strategy consulting firm) to assist in:

- designing the survey
- selecting respondents
- conducting the survey
- analyzing the results

In designing the survey, it is important to ask the right questions about strategy. For example, to understand the customer's value proposition, the survey might ask customers to rank the five characteristics of a product (or service) they regard as most important. To assess competitiveness, the follow-up question might ask customers to rank the companies in this sector whose product (or service) have these characteristics.

Respondents should include current, former and competitor customers to properly calibrate not only the views of loyal customers but also of those who no longer use the product or service as well as of customers of competitors. To obtain objective data, interviewers ideally should not identify the company, but disclosure is often required to gain access to key customers. Better results are usually achieved by face-to-face interviews conducted by an interviewer with 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 the same customer. Survey results require detailed analysis and interpretation and often include verbatim customer comments.



Management teams often discount the need for customer interviews by citing their own intimate knowledge of the customer base. Seldom does management apply rigour in canvassing former or competitor customers from which discerning information can be gained. In fact, the results of a comprehensive customer interview process are often both surprising and insightful.

The board does not necessarily need to be involved in engaging the external firm 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. However, SWOT analyses have some significant limitations.

SWOT analysis may 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 success factors (e.g., market position, product differentiation, cost structure, and channel delivery). The identified strengths and weaknesses are often less relevant to the enterprise's success. Additionally, most SWOT analyses lack fact-based analysis to back up their assertions; such analyses often assume competitors remain static and are unable to take action or change course.

### **SWOT ANALYSIS**

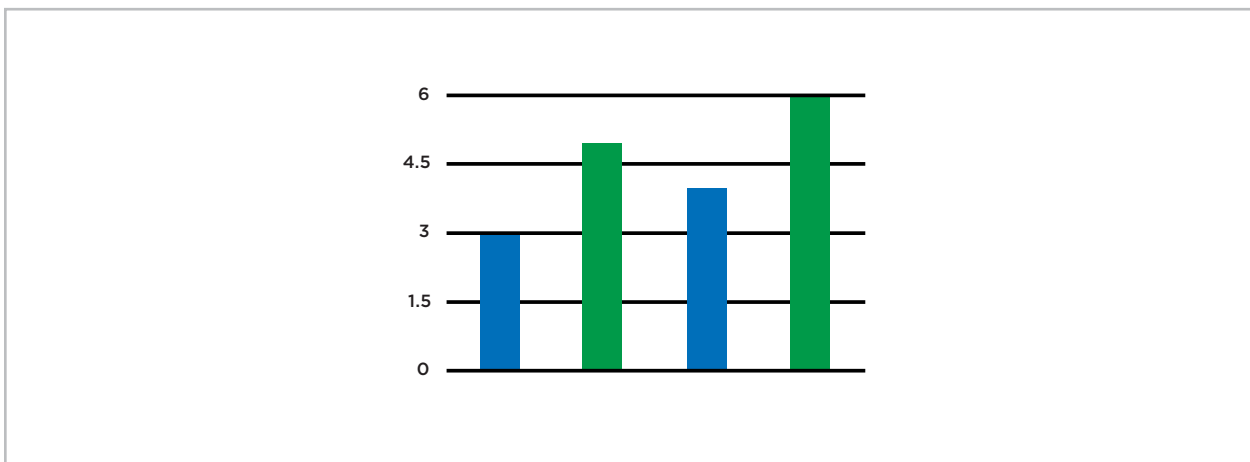




Management has a built-in bias to overestimate its performance and capabilities and underestimate competition. How many board members have reviewed strategic plans that claim the enterprise is the leader in technology or customer service or is the lowest-cost producer? How does a board come to accept that these propositions are true? Do board members ever ask management to provide hard data to back up such claims?

The heart of effective competitive analysis lies in three primary concepts:

1. The analysis should measure competitiveness against the critical success factors.
2. The analysis should be data-driven and fact-based.
3. The interpretation should be as objective and unbiased as possible.



Vast sources of competitive information are available, both inside an enterprise and externally. Customers and vendors are excellent sources. Search engines also can produce a surprising amount of competitive data. Public filings are also valuable sources of information. This data can be supplemented with external consultants who have relevant industry access and experience and extensive databases. In certain cases, it may be useful to engage specialized expertise (e.g., to assess technological competitiveness).

As part of competitive analysis, insight can be through financial comparison of business models. Such analysis would benchmark competition against not only traditional financial results (e.g., earnings, revenue growth, return of capital, and total return to shareholders) but also margin levels and line item costs (e.g., 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 could include superior products, breadth of product lines, cost structure, and pricing strategy.

### ***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?

To answer such questions, a board could 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 rigour used to develop fact-based strategy
- validity and importance of underlying assumptions
- bases for determining objectives
- 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 has unfettered access to the consultants' oral and written reports.



### Major strategic initiatives

In the life of every corporation, major strategic initiatives are undertaken for either offensive or defensive reasons. This diagram may assist boards in understanding the riskiness of a strategic initiative and determine the appropriate level of board involvement. Initiatives in the diagram's centre carry lower risk, while those at the perimeter are higher risk.

Strategies such as product line extensions and geographic expansion into known territories are typically lower risk; if unsuccessful, the consequences are reasonably predictable. Depending on 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 engage external expert advice to better understand and validate the strategy. Again, the board need not engage advisers directly but should have access to adviser reports and in-person meetings with the advisers as required.

### STRATEGIC INITIATIVES



### ***External strategy validation***

Corporations often engage consulting firms to assist management in strategy development. Top-tier strategy consulting firms bring industry-specific and subject matter expertise, deep analytical skills, and a robust strategy development process. Where a transformational strategy is required, such firms often lead strategy development. However, in most cases, the executive organization has the capability and accountability to develop and execute the strategy. In those situations, a strategic consulting firm could be engaged to validate management's strategic plan. While validation processes vary, these firms provide objective, fact-based analysis, particularly around industry dynamics, key drivers and competition. The board does not need to engage the firm directly. The validation is usually a collaboration of the board, management, and the consulting firm.

### ***Stress testing through financial modelling***

Virtually every larger company maintains a long-term financial forecast with a time horizon of typically three to five years. Such forecasts are used to calibrate longer-term strategic plans and longer-term projects and capital expenditures, and to develop scenarios (i.e., "best case", "worse case", and "most likely case").

Financial modelling is an important tool for boards to use in calibrating and stress testing risk and is referred to in several areas throughout this document.

Strategic plans presented to boards rarely show downward trends in competitive or financial performance, yet in reality such trends can occur frequently. Underperformance takes place for a variety of reasons, including:

- misjudgments in assumptions
- unforeseeable external events
- underestimation of competitive strengths and actions
- overestimation of the company's capabilities or competitive advantages

Accordingly, a worst-case analysis may not truly analyze the worst case. Use of multi-scenario stress testing will assist the board to understand the financial implications of downside scenarios. It is useful for the board to work with management to develop stress test parameters including variations in key assumptions that underpin the base plan.



### ***Input into output***

A valuable board process is to ask management well in advance to provide an outline of the proposed final strategy document, its sources, the approach to data gathering and analysis, and key assumption requirements. Aligning planned output with board expectations ensures there are no surprises for management or the board on the day of presentation.

There is an old axiom that says management receives the labour union it deserves. The same can be said for boards of directors and strategy. How often have boards received strategy documents that are incomplete yet failed to insist that management go back to the drawing board? Poor strategy often results from a board's failure to set expectations well in advance and its lack of strength to reject an unsatisfactory plan.

### ***Constructive feedback and actions***

Even with the best intentions, strategic plans often fall short of the board's expectations. In these cases, it is helpful to employ a formal post-mortem process following the strategy presentation but before approval. Through this process, board members can identify areas where further analysis or clarification is required, where strategies may be misaligned with goals, or underlying assumptions appear to be too optimistic, pessimistic or invalid. Feedback to management on the plan's shortcomings is critical, but ineffective unless management is asked to modify or redo strategy until the board is satisfied.

### ***Post-strategy presentation risk assessment***

The final section in a strategic document is frequently 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 risk discussion and allow time for a more comprehensive discussion about strategic risk. It is helpful to schedule a risk review session within a month or so following the strategy presentation so boards and management can reflect on strategy solely from a risk perspective and set aside sufficient time for discussion.



### Board oversight processes

Effective board oversight processes set aside sufficient time at and between meetings for reflection and the gathering of additional information. Boards commonly hold several meetings on strategic risk oversight as follows:



- The board schedules an initial session with management to review the approach, sources of data, assumptions, and the outline-of-strategy document (see “Input to output” above)
- Management makes an initial strategy presentation.
- One or more follow-up sessions are scheduled to discuss open issues, additional analyses or other information.
- A formal post-strategy meeting exclusively on risk in strategy is held. (see “Post-strategy presentation risk assessment” above)
- Each of these board meetings should be video recorded.

## 2.2 Merger and acquisition (M&A) risks

### 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 abundant moving parts. Outright failures or underperforming acquisitions occur for reasons such as:

- misalignment with a corporation's overall strategy
- insufficient due diligence
- leadership and cultural differences
- over-valuation
- imprudent financing
- ineffective post-acquisition integration

The degree of board involvement in acquisitions should vary depending on several factors, including size, strategic importance, complexity and management capabilities. Please refer to [Overseeing Mergers and Acquisitions: A framework for boards of directors](#).

### Key M&A risks

#### ***Flawed strategic rationale***

An organization's M&A strategy, if executed effectively, should ultimately create value for shareholders. Determining how M&A is likely to create value also helps assess the potential opportunity and risks and dictates the criteria for screening possible targets. Risks inherent in the strategy will guide the company's choice of targets or merger partners.

The enterprise needs to be clear about its strategic rationale for making an acquisition:

1. Why is the enterprise pursuing the acquisition?
2. What gaps will the acquisition fulfil in the current organic strategy?
3. How will the M&A target add value to the enterprise?
4. What minimum risk-adjusted returns are expected?
5. What will the end state look like and what competitive advantages will be gained?

### ***Ineffective due diligence***

Due diligence is an important step for confirming the acquisition rationale, valuation assessment and identifying risks and gaining a thorough understanding of the seller's business. It should also confirm the validity and value of any expected synergies.

Due diligence errors often occur when the timeframe is compressed, the due diligence scope is inadequate and there is a lack of expertise.

### ***Leadership***

The intention to leave the M&A target leadership team in place after the acquisition heightens risk because of limited exposure to the target team throughout the M&A process, a management bias not to raise issues after closing, and the tendency to preserve a culture when cultural change is warranted.

### ***Cultural differences***

Two of the most common issues with M&A are:

1. failure to understand the cultural differences between buyer and target
2. the length of time it takes to integrate and align cultures





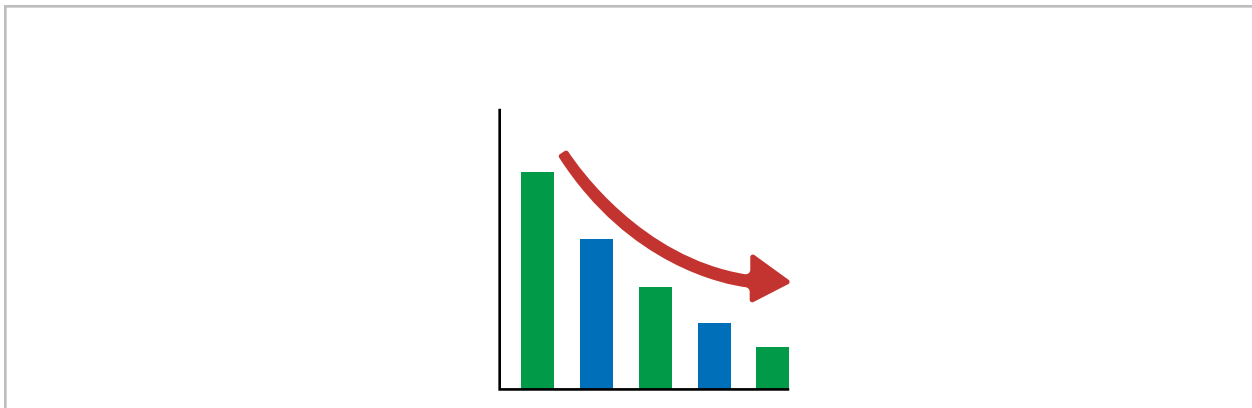
### **Financing**

There are risks associated with acquisitions that require short-term bridge financing with the expectation that permanent financing will be put in place subsequently. Such permanent financing may not be available when required due to the state of debt and equity markets or the performance of the combined entity.

### **Valuation**

Simply put, the risk is that of overpaying for an acquisition. This often occurs when:

- market values are unusually high
- there is competition to purchase the target company (and negative consequences if it is not acquired)
- performance of the target fails to deliver the expected value



### **Poorly executed implementation**

Implementation risks can occur when there is inadequate:

- transition planning
- implementation planning
- project management
- recognition of the complexity of the integration
- understanding of the pace of change
- measurement and reporting
- executive oversight

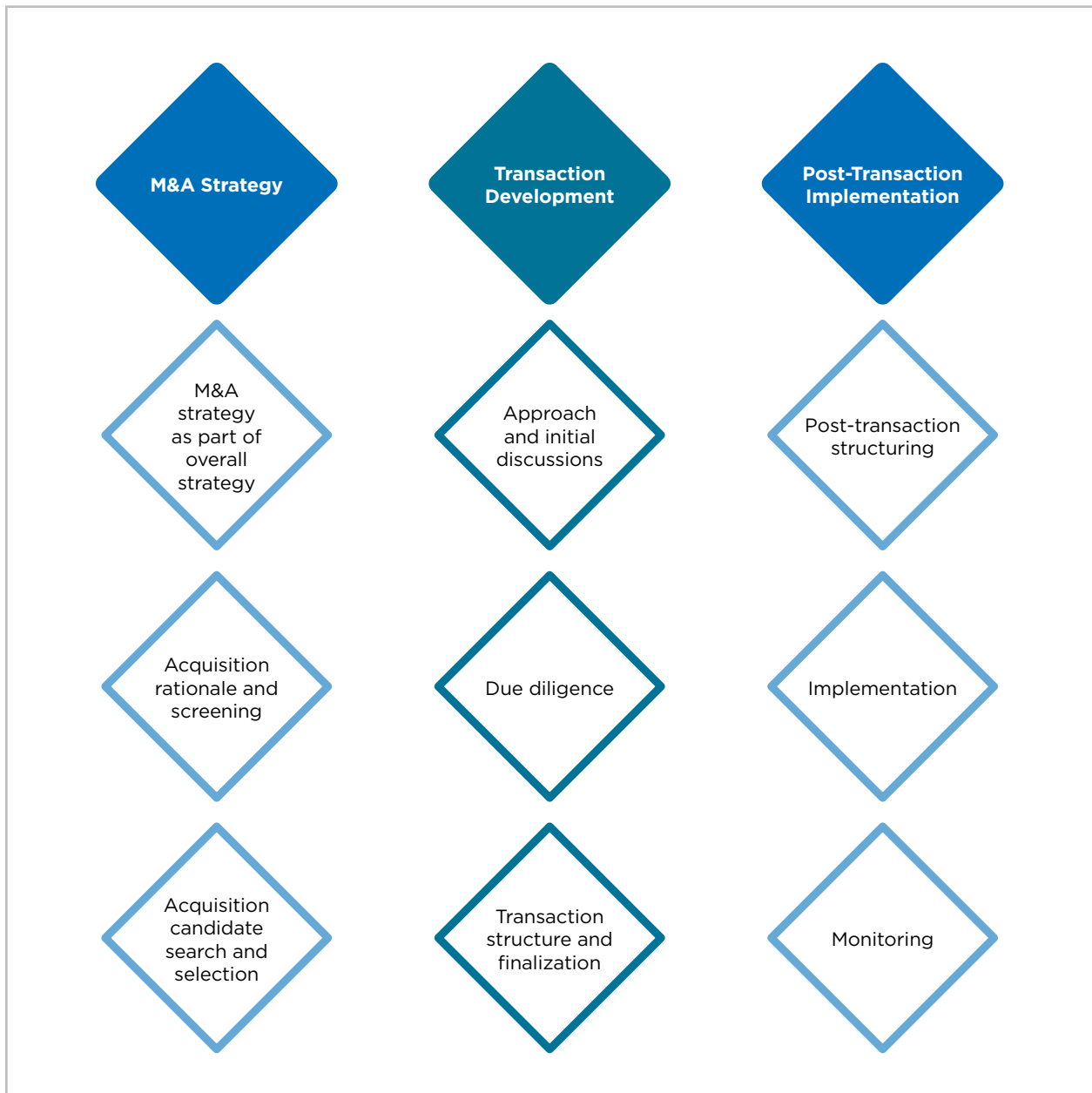
**An acquisition strategy can be inherently risky due to the many unknown or unpredictable factors that can come into play. Boards need to be extensively involved in any major acquisition strategy, including its assessment, planning, implementation, and financing.**

**Tools to assist boards in overseeing mergers and acquisition risk**

***Model for M&A framework***

Following a prescribed model for M&A oversight allows thorough reviews at each step of the process and opportunities to constructively challenge management as the acquisition timeline unfolds. Set out below is a framework extracted from CPA Canada’s publication [Overseeing Mergers and Acquisitions: A framework for boards of directors](#). This publication is particularly useful for enterprises that make acquisitions infrequently.

**MODEL FOR M&A FRAMEWORK**



### *Advance clarity on acquisition criteria*

It is helpful for boards and management to reach a common understanding of the criteria for prospective acquisitions. Mutual understanding of the criteria can help ensure alignment with the overall strategy and objectively measure and rank acquisition opportunities in advance of discussions with prospective targets. Such criteria might include:

- strategic importance (e.g., product or geographic expansion, market share consolidation, capability or technology acquisition)
- competitive advantage gain
- the target company's:
  - value
  - size
  - breadth
  - quality of products and services
  - customers
  - tangible assets
  - historical financial performance
- synergies

In addition, the dimensions of potential downside risk should be compared with the acquirer's risk appetite and risk tolerance.

### *Comprehensive fit analysis against the acquisition criteria*

Boards should insist on reviewing a fit analysis against acquisition criteria in two stages:

1. At the early stage (typically before or after preliminary discussions with the target), management should rank its comparison of the characteristics of the target versus the acquisition criteria in order of importance. Depending on complexity, the board may wish to have the comparative fit analysis updated after due diligence is complete and before final negotiations begin.
2. The updated analysis would provide a second look at the acquisition with the benefit of due diligence information.



### *Negotiation and valuation*

Size and complexity may necessitate the board's direct involvement in negotiations. They may also determine whether independent expert advice is required for valuation, negotiation, and structuring purposes. On the prospective sale of the entire or a major part of the business, an independent committee of the board is often formed to oversee and 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.

There are no shortages of valuation methodologies and experts to advise the board on M&A values. The board is often the last line of defence on valuation particularly when management is highly motivated to make an acquisition. Common sense should prevail. This simple question is often worth asking: "When do we get our money back?"

### *Due diligence and integration planning*

It is common for boards to delegate due diligence to management and advisers and, only after the acquisition, to become aware of unexpected issues that should have been identified in the due diligence process. Boards may wish to insist on reviewing in advance the scope of due diligence and the outline of the planned report on completion. The due diligence plan should be comprehensive, covering all material operations, functions, assets and liabilities. The plan should also clearly identify and address the key enterprise risks.

Often the seller is interested in compressing due diligence periods to preserve confidentiality and to limit the depth of due diligence activities. Boards should resist acquisition opportunities where time compression results in limited or superficial due diligence.

Where feasible, boards may find it helpful to have due diligence team members perform post-acquisition integration activities because of their familiarity with critical issues. The board should periodically review the status of the integration plan against specific milestones and expected results.

### *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 discussed earlier, independent comprehensive customer interviews 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. In major stand-alone acquisitions, strategy consulting firms are often engaged to form part of the due diligence team to validate the target company's strategy.



### *Leadership due diligence*

In many cases, the management of target acquisitions remains in place after the 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 checks. In reviewing due diligence procedures, boards should insist that leadership undergoes the same standard of due diligence that the organization applies when hiring new executives.



### *Stress test through financial modelling*

Similar to stress testing strategy, dynamic financial modelling should be used to stress test major acquisitions against a status quo scenario both for downside risk and upside potential, with particular focus on liquidity and capital structure (see “Financing” below).

### *Financing*

Where an acquisition requires external financing, boards should be mindful of the debt structure and the complexities and volatility of debt markets. Investors tend not to support companies that raise debt or equity to build a fund for future unidentified acquisitions, preferring to invest when acquisitions are known. This tendency can create a need for short-term bridge 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 causing liquidity issues.

In examining an acquisition strategy that involves bridge financing, boards should ensure that:

- management has a clear refinancing strategy
- capital markets appear stable and receptive to refinancing
- the state of the relationship with current lenders is stable
- financial stress testing show that a liquidity issue is unlikely in the event refinancing is un-available



### *Financial staffing*

In stand-alone acquisitions, the acquiring company is often comfortable with the target company's management organization and prefers to keep it intact. In these cases, boards should insist that senior financial staff be appointed to the acquisition management organization, at least for a period of time. Having reliable financial information and insider insight into the business, at least during integration, can provide early warning of potential issues. As a side benefit, this can also accelerate financial reporting and systems conversions.

### *External advice*

On major acquisitions, engaging experts for advice on specific areas may be advisable. Management usually should engage the advisers, provided the board has direct access to such experts. It is important for the organization to establish clear mandates and deliverables for each advisory engagement as well as direct oversight by the board or its committees in conjunction with senior management. In M&A activities, typical engagements and the service providers are as follows:

M&A Advisory Services	Service Firms
<ul style="list-style-type: none"> <li>• review and validation of specific acquisition target strategy</li> <li>• negotiation and valuation</li> <li>• leadership and organizational due diligence</li> <li>• financial due diligence</li> <li>• financing</li> <li>• environmental due diligence, legal</li> <li>• compensation and pension due diligence and planning</li> <li>• legal services</li> </ul>	<ul style="list-style-type: none"> <li>• strategy consulting firms, industry- specific boutique firms</li> <li>• investment banks, transactional advisory services in public accounting firms</li> <li>• organizational advisers, managerial assessment firms, executive recruitment firms</li> <li>• transactional advisory services in public accounting firms</li> <li>• strategic advisory firms, investment banks</li> <li>• environmental consulting services firms</li> <li>• compensation and pension advisory firms</li> <li>• legal firms</li> </ul>

**In M&A transactions, certain advisers are typically paid based on the success of the closure. Boards should be cautious when taking advice from advisers whose fees are contingent upon completion of a transaction, since there is an obvious bias toward the outcome.**



## 2.3 Financial risks

### Overview

Financial risk generally falls into three broad and interrelated categories:

1. liquidity
2. capital availability
3. capital structure

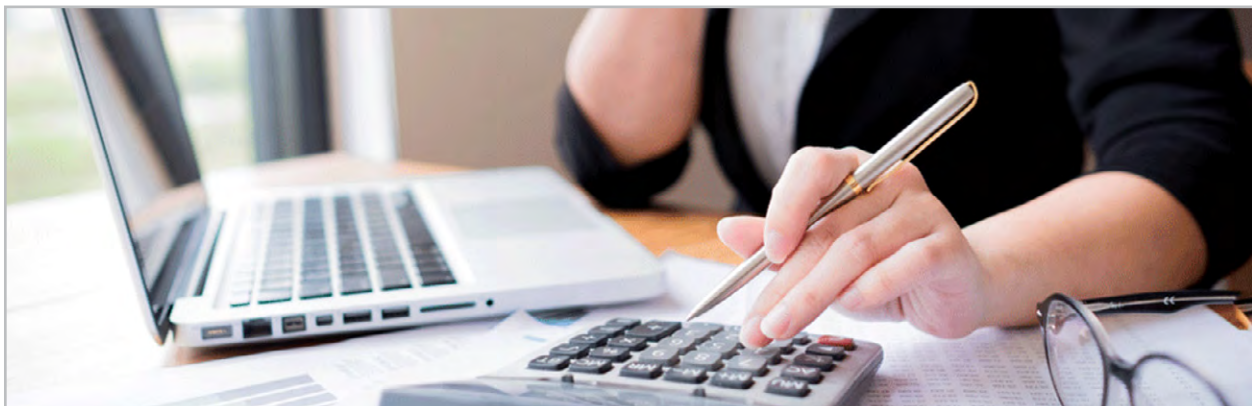
Liquidity risk occurs when corporations are unable to generate sufficient internal cash flow to sustain operations. Liquidity issues often arise when a corporation has sustained losses, is undergoing major capital expenditures, when large unplanned expenditures are required (e.g., those arising from unfavourable litigation) or if lenders are unwilling to renew debt facilities.

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

The corporation's capital structure may pose risks, particularly those associated with the absolute level of indebtedness, the mismatching of short and long-term debt, and the timing and quantum of debt repayments.

Additional financial risks may arise from movements in foreign exchange, interest rates and hedging / derivative strategies.

**Boards of directors should be aware that pressure from investors for higher returns on equity combined with available, inexpensive debt and a bias for growth often results in inappropriately high debt levels, which can be further compounded by a financing structure that is disproportionately biased to a short duration. As the last line of defense on financing strategy, the board should bring a conservative bias to the capital structure.**



## Key financial risks

### ***Failure to manage for cash and liquidity***

Effective liquidity management requires management and boards to focus primarily on revenue, earnings, EBITDA (earnings before interest, taxes, depreciation and amortization), working capital and debt and spend little time on cash flows. EBITDA is widely used as a financial measure, supposedly to synthetically represent cash flow. Nothing could be further from the truth. The only seemingly redeeming benefits of EBITDA are ease of calculation and allowing company comparisons by eliminating the effect of different capital and taxation structures.

This difference between EBITDA and cash flow can be enormous since EBITDA does not include cash outflow for interest payments, the portion of taxes paid in cash, changes in working capital, capital expenditures, investments, dividends and the repayment of debt.

Look no further than organizations in financial distress to understand the importance of true positive cash flow and the availability of cash.

### ***Failure to understand the true level of financial obligations***

Understandably, organizations pay attention to debt obligations including monitoring covenant compliance and periodic testing through ratios, benchmarking, and liquidity analysis. Often ignored are debt like obligations such as leases, future pension and benefit payments and capital expenditures on major projects where there is limited ability to suspend project completion.

### ***Bias for greater leverage***

Investors can be critical of management in organizations that have “lazy” balance sheets (i.e., large cash balances and limited debt). They also are often negatively vocal about having their investment diluted when the enterprise is considering raising additional capital through a new equity issue, preferring cash to be used for share buybacks and higher dividends even if this means taking on additional debt. Executives can fall prone to overreacting to investor interests and take on more debt than warranted during strong economic periods only to face solvency or debt-service issues in down cycles. Of course, when business conditions change, those same investors can liquidate their investment whereas the corporation has no such luxury.

### ***Excessive debt***

No individual is comfortable with excessive debt, yet many corporations find themselves with far too much debt, often the result of financing acquisitions or major projects. While at the time, the debt levels may have appeared manageable, when business conditions change, such debt can become an albatross, impacting earnings, cashflow and potentially putting the enterprise at risk of loan default or even insolvency.

### ***Mismatch of short- and long-term debt***

Currently (summer 2021), interest rates on term debt are relatively low and rates on short term debt are even lower. While this latter type of financing instrument is attractive, it has one major drawback – it requires periodic renewal. And therein lies the risk. When there is an alignment of solid corporate performance and buoyant credit markets, roll-over of short-term debt is uneventful. But when one or both turn down, corporations can easily find themselves in an unpleasant credit situation.

### ***Failure to refinance when financing is available***

A common financial management error is to delay timely debt refinancing because of expectations of a more favorable future financing climate only to find debt markets are either more expensive or unavailable when debt principal repayments come due creating an unnecessary and sometimes painful liquidity crisis.



### ***Failure to plan effectively for capital needs***

Well-run enterprises seldom have growth plans constrained by lack of capital. Financial planning involves:

- understanding future capital requirements in the context of the enterprise's strategy
- having buffer capital in the event of a downturn
- developing an appropriate capital structure that prudently balances leverage with financial stability

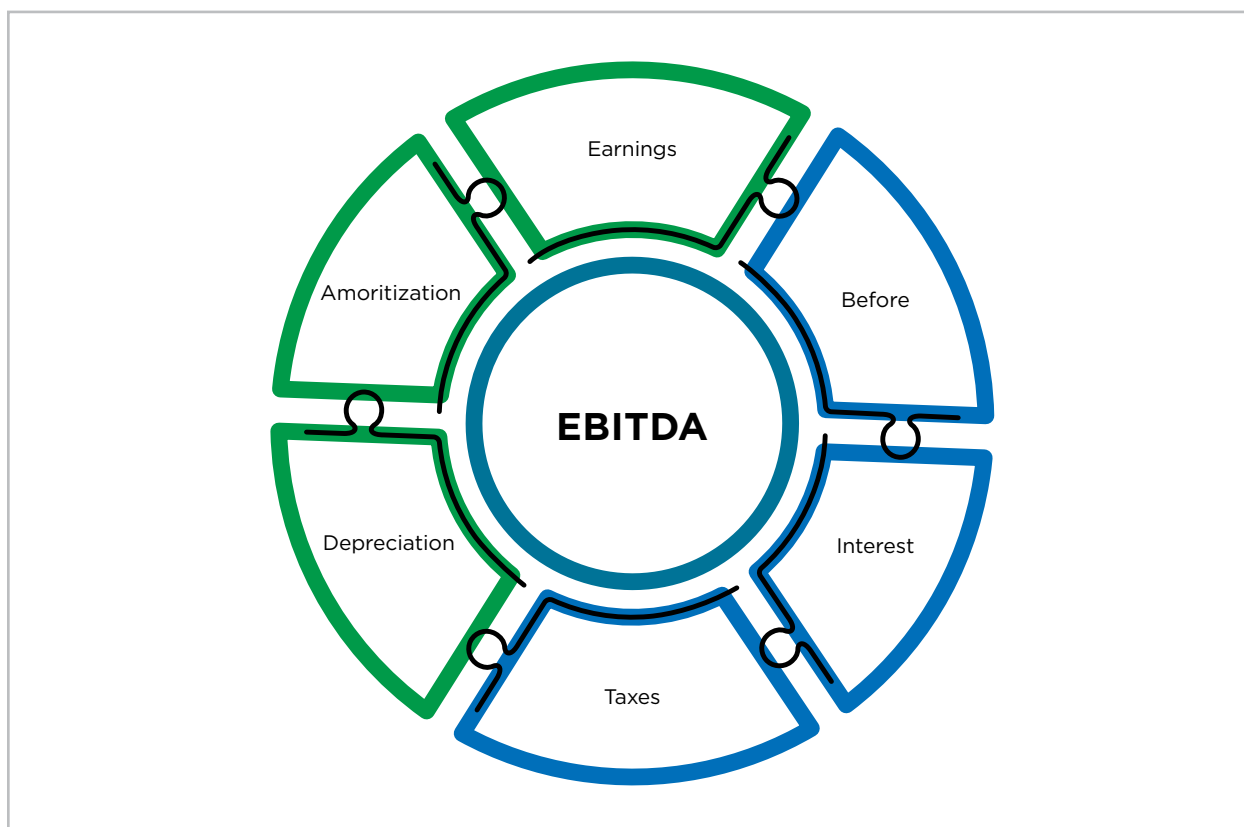
## Tools to help boards oversee financial risks

### *Liquidity stress testing*

As witnessed in past financial crises, when businesses are distressed, their focus shifts rapidly from earnings to cash flow. When examining overall risk and the enterprise's ability to withstand a downturn, stress testing the balance sheet and cash generation capability is very important. In working with management, boards must consider various assumptions in business plans (often well beyond management's worst-case scenario) to understand the limits of cash generation capability and debt capacity. Interestingly, cash availability can be an issue not only when a business is contracting, but also when it is rapidly expanding, due to working capital and capital expenditure requirements.

Many companies use EBITDA as a measure of cash flow. Directors should be mindful that this metric could be misleading because it ignores several important categories that involve cash, including working capital requirements, capital expenditures and debt repayment. To examine liquidity, boards will want to focus more on the capability of the enterprise to generate cash after all required investments in working capital, long-life assets, and future cash obligations, including debt repayments.

### EBITDA AS A MEASURE OF CASH FLOW



### ***Duration analysis***

In periods of tightening credit markets, many corporations may show an imbalance in structure and duration of debt instruments. For example, short-term credit facilities, usually used to fund variations in working capital, may be a source of funding for longer-term investments. Over-reliance on short facilities can pose serious liquidity issues if renewals are at risk. Similarly, longer-term debt that is coming due may be difficult to refinance because of volatile credit markets and poor company performance through recessionary periods. Duration analysis shows each period when debt is due for repayment, projected internal cash flows over the same periods and the gap, if any, requiring refinancing. Boards should be kept abreast of pending debt renewal dates and undertake refinancing discussions one or even two years 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, other off-balance sheet liabilities or obligations should be considered when assessing the strength or gaps in a corporation's capital structure. Examples include pension funding and post-retirement benefit obligations, long-term leases, and obligations for large capital projects.

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

Capital-intensive businesses often have large multi-year projects involving significant capital expenditure obligations. Uncommitted capital expenditures technically are not legal obligations; however, in the absence of a liquidity crisis, such expenditures are highly likely to occur and require funding. While capital commitments should be included in a liquidity analysis, it may also be useful to quantify and include such obligations in the capital structure analysis to understand the full breadth of a corporation's liabilities and ongoing commitments.

### ***External review of capital structure***

To assist the board to understand the limitations of the corporation's capital structure, it is helpful to periodically engage external advisers to perform a detailed review. This review should pay close attention to the nature and structure of indebtedness. For example, an examination of short-term credit facilities often reveals a borrowing-base limitation based on working capital levels that may limit borrowings to well below the facility's stated size.

Advisers can provide helpful input regarding the timing of renewals, the state and receptiveness of debt and equity markets, and the characterization of specific lender strategies in volatile or stressed situations. Some strategy consulting firms offer this service at a modest fee. Investment banks also can provide advice, although boards should keep in mind that such firms may have a vested interest in recommending capital-raising initiatives.

For larger corporations, reports from rating agencies may offer another source of objective data on capital structure.

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***

While external advisers can help assess debt and equity markets for renewals and additional capital, capital and debt markets can close rapidly in times of volatility. In such times, sources of capital may be limited to monetizing assets through outright sale or sale-leaseback, by stretching vendor payments, and by reducing current assets through various means. Boards should periodically assess cash availability under various scenarios and combinations to determine risk thresholds.

**Boards of directors should be wary of industry capital-structure benchmarking data and should take cold comfort in knowing the corporation's capital structure is in line with competitors, many of whom may themselves be overleveraged. Instead, the board should examine the capital structure in the context of capital requirements, variability in results, and industry dynamics.**

## 2.4 Organizational risks

### Overview

Ineffective management may create or not address organizational risks that result in value destruction or underperformance. Exposures can be related to the insufficiency of competencies, inefficient deployment of staff to execute strategy and perform day-to-day operational activities, and to failure to attract, motivate, train, develop, retain, engage and deploy talent, as well as cultural considerations.

### Key organizational risks

#### Leadership

Ineffective leadership may pose 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.

In addition to overall ineffective performance, there are at least five other areas of leadership risk:

1. mismatch of leadership requirements to the incumbent's capabilities
2. lack of strategic capability
3. ineffective succession planning
4. leadership bias toward growth rather than downside protection
5. influence of incentives

Organizations never remain static. As a result, leadership requirements often change. For example, enterprises in growth mode require a certain set of leadership capabilities – usually outward facing, aggressive market- and customer-centric and investment-focused.

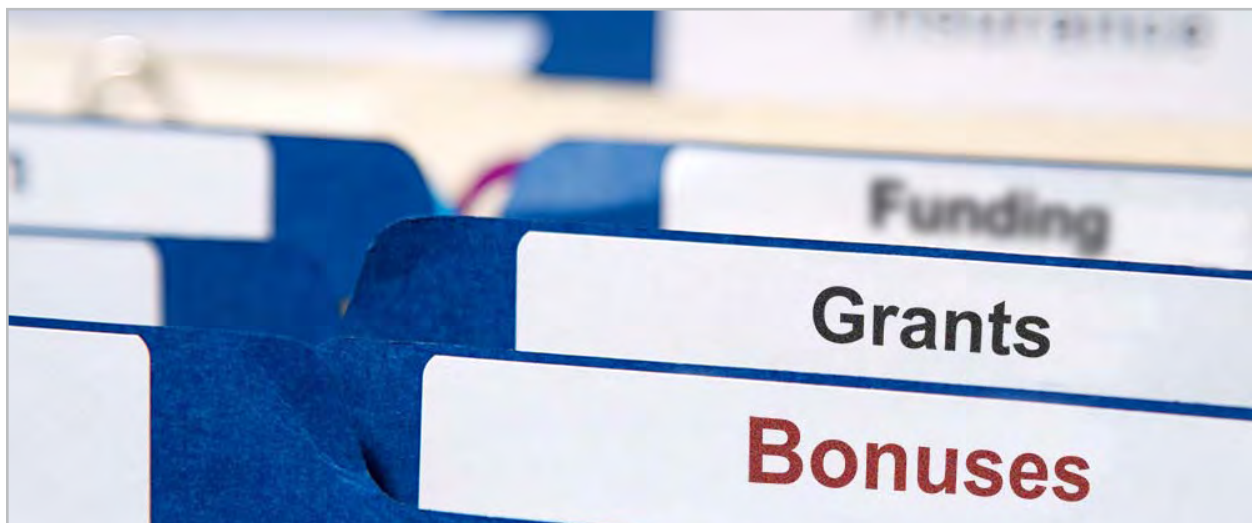
Conversely, enterprises facing downturns require a different skill set focused on cost containment, cash preservation and divestment of non-core or underperforming assets. Leadership risk often occurs when requirements change and are unaligned with the CEOs strengths.

The CEO is the enterprise's chief strategist but not all CEOs have the depth of strategic capability required. When this is recognized, organizations often bring in supplemental support either by hiring senior level strategists or engaging strategy consultants.

There are only a few sources of CEO candidates for succession: internal and external executives. Absent a transformative leadership need, the selection of an internal candidate is universally viewed as the lowest-risk alternative because of their experience with the enterprise and first-hand exposure to the board. But this option often fails because of either the inability to produce qualified candidates or selecting an internal candidate who ultimately underperforms. Both scenarios frequently result from flawed CEO succession planning. Poor successor development, changing leadership requirements and incumbent CEO bias and timeline are often the root cause.

Effective CEOs excel at balancing returns with risk. But in today's world, there is no shortage of pressure on CEO's to produce growth. This can result in an imbalance a bias for growth not commensurate with risk.

Incentive-plan designs and target setting can result in unintended results, particularly if they are unbalanced or overly incentivise for specific results. For example, overweighting incentives for earnings may result in sub-optimizing revenue growth opportunities. Similarly, long-term incentive plans tied solely to stock price may result a bias to underinvest for longer-term growth.





### Talent

- inadvertent competency gaps
- preoccupation with succession planning versus talent quality and depth
- insufficient emphasis on upgrading middle management talent
- failure to create opportunities for top performers to excel
- underpaying top performers
- lumping training and development together
- overreliance on external sources for staff development
- failure to address underperformers early

Inadvertent competency gaps can arise when organizations fail to allocate expenses in accordance with the key drivers of the business. For example, what we call “G&A creep” can occur when enterprises overallocate resources to administrative functions rather than their core activities (e.g., sales and marketing in consumer products businesses or R&D in technology companies). This can create insufficient depth of talent in critical areas.

While it is indisputable that succession planning is important, organizations often overemphasize succession rather focusing on talent quality and depth. Having sufficient talent will usually solve most succession issues whereas all the succession planning in the world will be unsuccessful without a robust talent pool.

Understandably, boards focus attention on the senior management ranks. Yet well-run organizations put particular emphasis on strengthening the middle management layer. This group usually plays a key role in strategy execution and is a critical source of competitive advantage.



Top performers are critical in any organization. Such individuals are usually driven by the incessant need for greater challenge, recognition, and rewards. Failure to create new opportunities and challenges for top performers can be a major reason for retention issues. Similarly, compensation systems that do not pay proportionally more for top versus average performers can cause top performers to seek employment elsewhere.

Training and development are often lumped together yet they are entirely different. Training usually focuses on understanding and improving job functions whereas development is based on expanding the skills and experience of individual employees. Typical development plans contain identified educational programs yet often lack the two most important development tools - expanded responsibilities and mentorship.

Finally, attraction and retention of talented people can be negatively influenced if poor performers are allowed to remain within the organization.



### **Culture**

The risk areas related to culture include failure to:

- embrace cultural evolution as times change
- ensure diversity, equity and inclusion are recognized as an important part of culture
- balance desired corporate culture in global organizations with local norms
- recognize the difficulty and time involved in cultural integration following an M&A transaction

Successful enterprises recognize that organizational culture cannot remain static and must continue to evolve. Not only is cultural shift necessary as priorities and conditions change within the enterprise, but it is often generational. For example, the culture in which the baby boomers were comfortable and excelled is completely different from a progressive culture required for Generation X and the millennials.

It is not uncommon for international enterprises to attempt to impose a common culture across the entire organization in every country in which they operate. This can be both unrealistic and detrimental to the success of the business. Cultural norms in each country cannot be ignored. Rather, such norms should be embraced and form part of enterprise's culture within the region.

One of the important tasks following the closing of an acquisition is to modify the culture of the acquired organization to align it with the acquirer. Typically, the plan timeline is about two years. The reality in most instances is that cultural change will take much longer to effect and cannot be accomplished without significant management changes.



**The global pandemic dramatically changed the way we view our human resources.**

### ***Changing labour dynamics***

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

### ***Governance considerations***

In addressing leadership risk, the board's usual oversight role is altered. Here the board has direct responsibility for selecting and assessing the performance and capability of the CEO and, to a certain degree, other corporate officers.

Assessing the capability of management to develop and execute the vision and strategy for the corporation and operate its daily business 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
- exercise of good judgment, particularly in risk / reward situations

## Tools to assist boards oversee organizational risk

### *Leadership assessment*

The chief executive officer's capability and performance is critical to the success of any enterprise and also poses significant risk. Most boards undertake an annual review of the CEO's performance. However, such reviews typically focus on and assess periodic results of the business and the CEO's performance against specific annual objectives.

Boards may find it useful to periodically review the CEO against other measures including capability, suitability and scalability. In evaluating these qualities, it is important to establish appropriate criteria, including the criteria that the board would use to hire for that position at that point in time. This would involve first understanding the critical requirements and challenges of the position. In that context, the board would then assess:

- relevant skills and capabilities (e.g., leadership)
- talent attraction
- team building
- vision and strategy
- internal and external communications
- track record
- judgment
- foresight
- risk management

The review of a CEO's suitability should assess his or her strengths in terms of the business's future prospects and related leadership requirements. 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. Conversely, CEOs who manage well in a turbulent environment may be ill suited to lead an organization in accelerated growth.

Scalability refers to the capability to handle a greater level of complexity which may or may not relate to changes in size.

Given that the board's exposure to the CEO through the year is limited primarily to a boardroom environment, developing a comprehensive assessment of the skills and competencies can pose a challenge. An important source is input from the chair of the board or lead director, who typically would have more interaction with the CEO between meetings. Other sources of information can come from the chair of the audit committee through his or her interaction with the chief financial officer, shareholders and industry analysts. Obtaining information about the CEO from direct reports and stakeholders must be handled with extreme care so as not to undermine reporting and other relationships.

**Boards of directors should continuously assess the performance of the executive organization (particularly the chief executive officer) and to go further to evaluate his or her skills, capabilities and suitability in light of changing market and competitive dynamics and the trajectory of the corporation's performance.**

#### ***Compensation bias***

Traditional executive compensation with high variability and a significant equity component is designed to align executives with shareholders' interests. By its nature, this structure also encourages executives to take risks. This is not necessarily negative since businesses take risks all the time.



The art in establishing executive compensation is to drive intended behaviour, which includes prudently matching reward with risk. In public companies, where investors are increasingly vocal about creating short-term shareholder value, CEOs are under significant pressure to deliver improved results quarter after quarter. The combination of investor pressure for improved results, significant equity-based compensation, and lucrative termination arrangements can lead to unintended excessive risk-taking. Boards should ensure that such compensation practices are not so heavily skewed that undue risk-taking could result.



The criteria and structure of compensation arrangements for the chief financial officer could differ from the CEO's arrangement to reward for financial prudence. Independent advice on the at-risk component of executive compensation can be useful.

### ***Tone at the top***

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

### ***Capability of risk management staff and enterprise risk management (ERM) systems***

The board should periodically assess the strengths, depth and independence of staff involved in managing day-to-day risks and the maturity and robustness of the risk management systems and processes. Resource limitations, ad hoc risk management systems, and absence of defined accountabilities should heighten board concerns.

### ***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 a timeline for readiness to move into more senior positions. For some corporations, succession planning is regarded as more of an academic and required exercise than a useful tool to map and prepare for future organizational changes. Boards rarely look back at previous succession plans to determine their validity and effectiveness.

Boards may also undertake a talent review to address the depth of talent in the organization and its scalability. Boards could ask questions such as:

- What are the higher-impact management positions 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%, or 100%?

**Although succession planning is an important board function, it has little value if the enterprise's talent pool is insufficient. A robust talent assessment in all key disciplines will assist boards to evaluate the succession plan's effectiveness.**

### ***CEO planned retirement***

Corporations may be fortunate to have an orderly CEO succession plan in which the CEO retires and their replacement has been identified. In many cases, the timing of the CEO's retirement is determined by a personal agenda. Boards should be aware that an orderly CEO succession could create a lame duck situation or leadership stagnation. Soon-to-retire CEOs could be less willing to drive forward toward a longer-term vision, and could become more risk-averse. While delicate, in situations where 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, with appropriate treatment for an earlier-than-planned departure.



### ***CEO / chair succession***

In certain instances (e.g., a planned succession), when a CEO steps down, they may be considered for 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 their successor's performance. Additionally, with today's fast-changing pace of business, previous CEOs may become out-of-date but remain unduly influential at the board. Either situation can create risk. Additionally, current securities regulations related to independence limit the direct involvement of former CEOs in certain board matters.

**Boards should exercise extreme caution when considering the former CEO for the role of chair of the board. While retaining his or her experience and knowledge is tempting, the benefit must be weighed against the risk of lack of independence and objectivity.**



## 2.5 Operational risks

### Overview

Operational risks are typically broad and often unique to each corporation. Operational risks are generally defined as the exposures related to the day-to-day running of the business.

### Key operational risks

#### *Benchmark metrics with root cause analysis*

Failure to utilize internal and external operational metrics with root cause analysis can result in uncompetitive performance and customer dissatisfaction.

Operational metrics should contain internal and competitive benchmark data and incorporate leading and lagging indicators. Examples of customary lagging indicators would include actual sales data and sales and marketing expenses compared with plan. Typical quarterly explanations around unfavourable variances might involve the state of the overall market, the timing of product launches and related expenditures on sales and marketing. These lagging indicators are easily measurable, are backward focused and output oriented. On the other hand, leading indicators are predictive measurements and focus more on the underlying reasons for target shortfalls. Leading indicators, for example, related to the success of new products would include initial customer satisfaction data, repeat customer orders and sales returns – all indicative of future sales performance.



Having relevant benchmark data can be very insightful. This information would include both lagging and leading indicators and be internally and externally focused. For example, internal benchmark data might include comparative revenue by region that identify the most to least successful regional results as well as leading indicators such as regional lead-generation information and customer awareness. Because competitors never sit idly by, and their actions are often unpredictable, tracking competitor activities is important. In the example, valuable benchmark data might include competitive product performance comparisons as well as competitor customer awareness and satisfaction information.

Leading, lagging and benchmark data, while interesting, have little value without insightful root cause analytics. There are various methodologies to conduct root cause analysis, but generally the distinction must be clearly made between the symptom and the disease by continuing to probe the issue using a series of “why” questions.

### ***Customer dissatisfaction***

Failure to meet customer expectations has strategic and operational implications. Tracking customer satisfaction using objective data can be useful in pinpointing areas requiring operational attention such as product quality and delivery performance.



### ***Technological competitiveness***

In an era when technology is creating enormous opportunities for disruption, virtually every organization has to either embrace technological advancement or be left by the wayside. This is both a strategic and operational risk. Benchmarking technological competitiveness has its challenges, particularly understanding the potential of new entrants armed with new technologies.

### ***Operational disruption***

Operational disruption can take many forms. It could be an interruption at a key facility, the loss or disruption of computer-based systems and networks or an unanticipated labour dispute. All are operational exposures with potentially significant consequences.



### ***Cybersecurity***

In recent years cybersecurity has been at the forefront of the board's interest in risk – and for good reason. Failure to protect sensitive, confidential data and failure to maintain the efficacy and reliability of internal computer-based systems are critical and often highly publicized exposures.

### ***Capacity constraints and optimization***

Capacity constraints whether in manufacturing or service-related industries pose risks to customer service and satisfaction and can have serious economic consequences. Failure to optimize capacity, particularly in periods of economic downturn, poses similar risks.

### ***Vendor and distribution dependencies***

Third-party dependencies always pose risk, particularly when there are only limited alternative sources of supply. Such exposures tend to be difficult to mitigate because of switchover time 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 strategy execution such that boards of directors should focus risk assessment on those operational elements that represent strategic and operational concerns critical to the success of the enterprise.**

## Tools to assist boards oversee operational risk

### ***Customer satisfaction – independent customer interviews***

As discussed in [validation of product / service differentiation](#), comprehensive customer interviews can provide excellent insight into the effectiveness of a corporation's strategy and pinpoint operational issues, including product reliability and functionality, service quality, perceived value for money, delivery performance. These interviews can also yield useful competitive benchmarking information. Reviewing trend information from periodic web-based customer surveys also can highlight deteriorating operational performance.

### ***Product and service failure analysis***

Where product quality is a major risk or the board has concerns with product quality, analyzing product failures before shipment (as identified through quality assurance) and the amount and nature of products returned from customers can help pinpoint underlying operational flaws.

### ***Capacity constraint analysis***

Where corporations face capacity limitations that could create a performance risk, it is helpful for boards to review capacity utilization and constraint analyses to identify capacity limitations at various volume levels, the reason for capacity constraints (e.g., buildings, equipment and labour; staffing for service organizations) and the requirements and timelines for alleviating such constraints.

### ***Competitive margin analysis***

When a corporation consistently earns higher margins (gross, operating and pre-tax) than its competitors, this usually stems from some form of competitive advantage. Differentiating factors could include:

- scale
- products
- technology
- product mix
- manufacturing cost
- distribution
- sales and marketing
- administrative efficiencies

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

### ***External cybersecurity reviews***

At the risk of stating the obvious, utilizing external sources to assess and test the security of information systems is vitally important as is using outside expertise to design appropriate controls and detection systems. In-depth board updates, at least annually, are warranted.



### ***Vendor dependencies***

Reliance on one (or very few) vendors and distributors can create significant operational risk. Boards should understand the critical areas of dependencies and periodically review:

- vendor financial health
- capacity breadth
- limitations (e.g., single versus multiple facilities)
- business relationships
- competitor positions with the vendors (e.g., Who gets preferential treatment in periods of capacity constraints?)
- alternative sources of supply

## 2.6 External risks

### Overview

External risk is any exposure related to potential events or occurrences beyond the direct control of the enterprise.

Interestingly, the majority of risks listed by public companies are threats outside their control (and there is no shortage of these), yet after examining a comprehensive risk universe, some of the most important risks turn out to be self-inflicted.

### Key external risks

#### Competition

Competition is usually an enterprise's greatest threat. Yet, ironically, management and board rigor around competitive analysis is often perfunctory at best. Quarterly board packages frequently contain cursory information on competitor activities. Even strategic plans fall woefully short of competitive assessments, often limiting the analysis to comparative strengths and weaknesses and incomplete benchmarking data.

Common flaws for boards and management in understanding and addressing competitive risk includes underestimating the effectiveness of competitors' strategy and resources while at the same time overestimating their own. Assuming competitors are frozen in time is another shortcoming. These failings inevitably lead to failure to develop a truly competitive, executable strategy and, ultimately, to underperformance.



### **Macroeconomic environment**

Although often largely anticipated, variations in global and national economies are a well-known exposure. However, unforeseen macroeconomic volatility can pose substantial risk ranging from reduced market demand to changing competitive behaviour to limitations on liquidity and capital availability. The challenge comes from estimating the extent and duration of both negative and positive changes.

### **Geo-political arena**

Changes in the geopolitical environment, including changes in public policies, laws and regulations, can impact an enterprise negatively; in rare circumstances they could be beneficial.

### **Commodity prices**

Depending upon the industry sector, changes in commodity prices can directly or tangentially impact the enterprise.

### **Foreign exchange**

For international enterprises, foreign exchange rate fluctuations can affect their economics as well as financial reporting.

### **Interest rates**

Organizations with variable-rate debt are at risk for rising interest rates.



### ***Industry structural change***

In the current era, the amount of industry structural change has been unprecedented, largely due to the advent of new technologies. Obvious examples include the retail, taxi, and hotel industries as firms such as Amazon, Uber and Airbnb have gained considerable traction in those spaces.

Structural or cyclical changes within the industry sectors in which the enterprise participates can create high-risk situations. Boards of directors must be constantly vigilant to identify early changes in the external environment. They also must be aware of transformative technological, macroeconomic or industry-specific forces that could significantly alter the enterprise's performance, trajectory, or competitive position.





## Tools to assist boards oversee external risk

### *Macroeconomic volatility*

As historical events have shown, corporations will face periodic economic downturns that are often difficult to foresee. Predicting the duration and depth of a downturn is equally difficult. Given the major risks that unforeseen and uncontrollable external events can cause for 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 and assessment of the ability to rapidly cut costs in anticipation of reduced revenue.

### *Industry cyclicality*

Many industries are subject to cyclicality that arises from macroeconomic factors or industry-specific competitive forces or behaviours (e.g., chronic capacity expansion). In cyclical situations, boards should understand competitive dynamics in periods of contraction (e.g., pricing and capacity management) and obtain clarity on the corporation's strategy to sustain itself through tough 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), and its capital structure / financing strategy.



### ***Industry structural change***

Structural change within an industry may often seem to be part of conventional cyclicality and is not always easy to detect. The 2008 recessionary effect on the North American auto industry is obvious. The industry and its supply base underwent a major wave of structural change due to foreign ownership, offshoring of production and research and development functions, restructuring of dealer networks, and refinancing activities. The competitive landscape for this industry has irrevocably changed. The second wave of structural change occurred several years later with the advent of viable electrically powered cars and trucks. Autonomous vehicles no doubt will be the next catalyst for structural change in the auto sector.



As industries undergo macroeconomic shocks or industry-specific transformational events (e.g., digitization or competitor consolidation), boards should be cognizant that the strategic drivers and competitive dynamics of their businesses may require a significant change in fundamental strategy.

### **Black swans**

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" (i.e., the event was not predictable, had significant consequences and, in retrospect, could be rationalized as if it had been expected). A startling example is the April 20, 2010, British Petroleum (BP) offshore oil rig explosion that killed 11 workers on the rig, spilled tens of thousands of barrels of crude oil into the Gulf of Mexico, and required billions of dollars in clean-up and restitution costs. It is also a painful example of how multiple events or conditions occurring simultaneously contribute to a devastating outcome.



Regrettably, there are no obvious toolsets for boards to deal with such events. BP likely survived this incredible crisis largely due to the strength of its balance sheet. Many similar companies would not have survived. While financing theory attempts to optimize the capital structure through appropriate debt leveraging, the consequences of lack of liquidity and debt capacity in a crisis situation can prove devastating, if not fatal. Boards must always be wary of Black Swan events and, to the extent practicable, maintain a conservative bias to debt financing.

**“We don’t know what we don’t know” is a common phrase and an equally common concern among board members. Black Swan events occur infrequently, but when they do, the results can be calamitous. Boards that bring a conservative bias to debt financing will never regret this decision in retrospect.**

## 2.7 Compliance risks

Compliance risk can cover all exposure to breaches of laws, regulations, and ethics/codes of conduct. The extent of such exposure can vary widely depending on the locations in which the enterprise operates, its industry sector, and entity-specific characteristics.

For most public corporations, board oversight of compliance is well entrenched and often largely delegated to committees. For example, public reporting and disclosure requirements are handled under the mandate of the audit committee. Employment, compensation, pensions, and related matters usually are the domain of the compensation committee. Compliance risk is discussed comprehensively in numerous other publications. We have limited our discussion of exposure to compliance risk to the few important observations below.

Heightened exposure to compliance risk can occur when companies operate in multiple jurisdictions that have unique domestic laws and regulations or where business practice and cultural norms may depart from rules governing the parent company. For example, the United States imposes a far-reaching *Foreign Corrupt Practices Act* (FCPA), which applies to all U.S.-based issuers. Many international companies have encountered compliance issues arising from lack of knowledge or lack of training in foreign jurisdictions where accepted practices violate FCPA provisions.

Pharmaceutical, energy and natural resource industries are examples of sectors that are subject to industry-specific regulations that can pose significant risk.



Code of conduct breaches or acts of fraud, particularly those involving senior executives, can expose the enterprise and its employees to well-publicized legal liability.

Broadly speaking, the consequences of a compliance failure fall into three categories.

1. penalties and other sanctions for violating specific laws and secondary regulations
2. direct or derivative claims from affected parties such as shareholders or other claimants seeking damage claims and potentially leading to costly litigation
3. damage or loss of reputation that can significantly affect shareholder value and create adverse consequences for customers, employees and/or other stakeholders

## 2.8 Hazardous risks

Hazardous risks are highly diverse, covering a wide range of potential occurrences. The nature of hazardous exposure varies depending on the enterprise's type of business and its locations.

Hazardous risks pose threats to property, environment or health. Hazardous risk by its nature is difficult to predict and may never occur. However, a hazardous incident can create an emergency situation with a far-reaching financial impact and have other implications.

Although hazardous risk may be segregated into numerous categories, for purposes of this discussion, we categorize these risks in three groups:

1. natural disasters
2. environmental risk
3. occupational health and safety

Natural disaster exposures are extremely broad, commonly covering:

- atmospheric hazards:
  - hurricanes
  - tornadoes
  - extreme temperatures
- seismic hazards:
  - earthquakes
  - landslides
- hydrologic hazards:
  - flooding
  - soil erosion
  - drought

Susceptibility to such hazards is location-specific. That is, certain locations may be more or less exposed to certain types of natural disasters. These largely unpredictable hazards can pose risks to property, the environment and health.



Environmental risks generally involve adverse effects on the environment arising from emissions, effluents, wastes and resource depletion. Natural disasters cannot be prevented even where the cause is known. When considering environmental risks, however, it is important for the organization to examine the potential underlying causes. Typical causes include

- transportation hazards:
  - incidents involving dangerous materials
- infrastructure hazards:
  - gas line breaks
- industrial hazards typically involving human error or negligence causing pollution to:
  - air
  - soil
  - water
- hazardous material storage or processing causing:
  - explosions
  - fire

Common occupational health and safety hazards include:

- equipment operation and transportation accidents
- workplace violence
- communicable diseases
- slips and falls
- toxic exposure, particularly to chemical and gas
- electrocution or explosion
- repetitive motion and ergonomic injuries
- hearing loss

The consequences of hazardous occurrences generally involve:

- property loss or tangible asset-value destruction
- third-party damages often involving litigation
- regulator-imposed sanctions or penalties
- reputational damage



## 2.9 Reputation risks

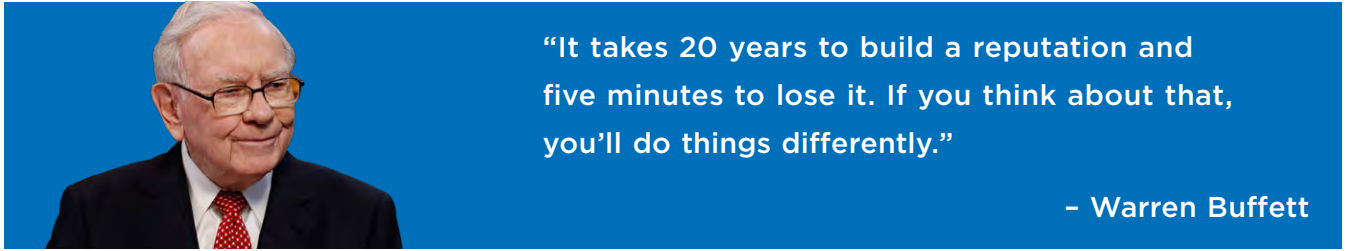
We assert there is no such thing as reputational risk. Rather, reputational damage is the negative consequence arising from the occurrence of other exposures. That being said, a corporation's reputation is a valuable intangible asset that clearly falls within the board's broader responsibility for safeguarding the enterprise's assets. Clearly, loss of reputation can greatly affect shareholder value.

Simply put, reputation refers to the perception of the enterprise by various stakeholders. Typically, key stakeholder groups include investors, customers, employees, suppliers and governments. Perceptions may differ among stakeholders and could be at odds with how the entity views itself. For example, an enterprise that consistently delivers positive financial results is likely to have a positive reputation among investors, analysts, and lenders. That same enterprise may be perceived negatively by its employees because of its high-performance culture and demanding work environment.

Additionally, reputation is dynamic. Stakeholder perceptions may shift for various reasons including:

- financial performance
- specific adverse occurrences
- unfavourable media coverage
- changes or actions of the corporation's leadership





While there is no shortage of occurrences that can adversely affect an enterprise’s reputation, broadly speaking, they include:

- product efficacy
- production processes and quality
- employee safety
- environmental practices
- compliance (including breach of ethics)
- unanticipated negative financial performance

These exposures have been captured as part of the risk-identification process as set out in this document. The key issue for boards is whether the consequential analysis captures and accurately quantifies the impact of damage to the enterprise’s reputation.



### 3. Risk tolerance and risk appetite

#### Overview

Every corporation faces risk. Appropriately balancing risk and reward to generate satisfactory returns to shareholders is fundamental to any business.

For purposes of the following discussion about the corporation's approach to risk, it is important to understand what is meant by the terms "risk tolerance" and "risk appetite." Perhaps the simplest way is to think about these two concepts as a hierarchy.



Risk tolerance reflects the limit of risk set by the organization that it would not willingly exceed. This limit can be expressed in quantifiable terms, such as level of invested capital, level of indebtedness, amount of allocated resources – both human and infrastructure. The limit could also be strategic. As an example, an enterprise may decide never to do business in a specific jurisdiction. This decision may include other subjective limits related to reputational consequences.

Risk appetite, on the other hand, is the level of risk the enterprise is willing to accept in pursuit of its longer-term goals, provided there is a commensurate return.

**The board and the senior leadership organization should be aligned in their understanding of these concepts and, most importantly, in their understanding of the resultant parameters of risk tolerance and risk appetite.**

## Risk tolerance

Without a real-time issue or potential transaction to address, board discussions about risk tolerance tend to be academic. Nevertheless, these discussions should take place for several reasons. They provide an opportunity for board members and executives to align their determination of the maximum risk the enterprise is prepared to absorb. They also present management with important information and parameters for strategy development. For example, setting dilutive earnings limits for potential acquisitions and boundaries for capital investments should help management develop appropriate strategic and financial plans within those parameters.

Risk tolerance should not be examined or quantified in isolation, nor should it be static. Risk tolerance should be determined in the context of the strength and stability of the enterprise and the industry in which it participates, the enterprise's maturity, and its positioning within its industry. Risk tolerance should also be considered in relation to strategy and related risks as well as other critical, identified risks. The quality of risk management systems, including the robustness of mitigation alternatives and the availability of viable response strategies, are also factors to consider. Additionally, stakeholder expectations concerning risk should not be ignored.

All these factors are known and to a greater or lesser degree can be quantified. The final factor boards should think about is the unknown – the so-called Black Swan and the compounding effect of simultaneous adverse occurrences as discussed in [Section 2.6 External risks](#).

## Shareholder and stakeholder expectations

Risk tolerance should be understood not only in the context of the industry in which the company participates and company performance it should also be considered in the context of shareholder and stakeholder expectations.



Consider the following, potentially counter-intuitive example. A well-financed industry leader in a mature, stable industry such as a utility should have a relatively high tolerance for risk. The consistency of its earnings and cash flow and strength of its balance sheet could support a relatively large higher risk undertaking while maintaining sufficient resources to sustain a significant adverse consequence. However, investor expectations regarding sustainability of growth and consistency of dividends may materially lower the board's risk tolerance parameters. Conversely, an early-stage technology or mining exploration company with limited resources may have a higher risk tolerance. Its business model is based on a high risk / high return strategy, and its investors recognize the speculative nature of such investments.

### ***Strategic and other critical identified and quantifiable risks***

Conventional thinking views risk tolerance as the potential adverse consequences of strategic decisions. Progressive boards treat risk tolerance as a critical input to strategic and tactical decisions. However, the consequential analysis and prioritization modules set out in [Section 5. Initial consequential analysis](#), [Section 7. Consequential re-analysis](#), and [Section 8. Prioritization](#), below, should assist the board to understand and quantify potential exposures when setting risk tolerance levels.

### ***Culture, quality of risk management systems, mitigation alternatives, and response strategies***

A robust risk management system, including early warning systems and an embedded culture that identifies and balances risk, are important factors in counterbalancing potential exposures. While assessing the quality of risk management systems is somewhat subjective, a fully resourced risk management organization with well-developed, mature systems and processes adds protection to the enterprise and provides boards with added comfort in setting tolerances for risk. In addition, understanding how risks may be effectively mitigated is also a factor in quantifying risk tolerance.

**In setting risk tolerance parameters, the board and management should be aligned in understanding the sustainability of the enterprise and the consequences of individual and interconnected risks.**

## Risk appetite

While determining risk tolerance is a passive exercise in setting limits, determining risk appetite is active and can be a driving force for growth for an enterprise. While risk tolerance is akin to limiting exposures, risk appetite is about optimizing the enterprise's risk / return profile.

Risk appetite is the level of risk the enterprise is willing to accept in pursuit of its longer-term goals, provided there is a commensurate return.

As the example below shows, risk appetite parameters are similar to risk tolerance but with one clear distinction. Risk appetite should also include a desired or expected rate of return or similar measure.

In setting risk appetite, board members should consider the same factors as they do in setting risk tolerance while overlaying expectations around returns. Some argue that the degree of risk appetite should vary depending on the nature of the decision – whether strategic or tactical. Others believe risk appetite should be scaled against minimum returns (i.e., the enterprise should set minimum return and investment guidelines but, for higher-than-minimum returns, may increase its risk appetite). There is no right or wrong answer, but the question is certainly worthy of board-level discussion.

Because business conditions and company performance change, risk appetite must be measurable, active and dynamic. In some cases, defining risk appetite may be straightforward, but defining expected returns may pose greater difficulty. For example, the board may set risk appetite for an acquisition at say \$200 million with a minimum return of 15%.

Companies make acquisitions for a variety of reasons, but generally to produce incremental returns. However, sometimes acquisitions are made for defensive reasons (e.g., to protect a position in a weakening market segment). In these cases, returns must be measured in terms of income and cash flow preservation rather than incremental returns.

**Underpinning risk appetite is the board's confidence in the organization's ability to manage risks at this level and to produce the minimum expected return.**

### PARAMETERS OF RISK TOLERANCE AND RISK APPETITE

Parameter	Risk Tolerance	Risk Appetite
<ul style="list-style-type: none"> <li>capital invested in a project or acquisition</li> <li>total debt to EBITDA</li> <li>cumulative earnings dilution over three years</li> <li>organizational change</li> <li>marketing spending on new product introduction</li> </ul>	<ul style="list-style-type: none"> <li>\$300 million</li> <li>3.0 × EBITDA</li> <li>breakeven for three years</li> <li>loss of 20% of the executive team</li> <li>\$20 million</li> </ul>	<ul style="list-style-type: none"> <li>\$200 million with a minimum internal rate of return of 17%</li> <li>2.5 × EBITDA</li> <li>30% of current earnings per share provided ultimate return of not less than 30%</li> <li>loss of 10% of the executive team</li> <li>\$15 million</li> </ul>

## 4. Mitigation and response strategy

### Overview

Enterprises face no shortage of risks every day that can arise from external sources as well as those that are self-inflicted. An effective enterprise risk management system has both mitigation and response strategies designed to lessen the impact of any material adverse exposure. Because mitigation strategy and response strategy are terms often used interchangeably, it is important to distinguish between the two. Mitigation strategy involves actions put in place prior to an occurrence that reduce or even eliminate the exposure's adverse effect; a response strategy refers to actions taken after the event that reduce the impact.

Effective risk management systems employ many different types of mitigation and response actions depending upon the nature and the quantum of the exposure.

### Mitigation strategies

#### Risk avoidance

At the extreme, one mitigation strategy is to avoid the exposure altogether. Risk avoidance should take place when the adverse consequence of an exposure exceeds the enterprise's risk tolerance level (i.e., the limit of risk the enterprise would be unwilling to exceed). An example of risk avoidance is the decision not to make an investment such as an acquisition that would result in taking on additional debt above a predetermined level. Risk tolerance and related avoidance could also be expressed in strategic terms such as a stated unwillingness to enter markets in certain high-risk jurisdictions.



### ***Reduce to predetermined limits***

The next layer of mitigation strategy involves reducing the exposure to within predetermined limits. Using the previous example, the enterprise would limit its investment in an acquisition such that the resultant increase in indebtedness fell under its tolerance level.

### ***Managerial oversight***

The most prevalent risk mitigation strategies involve offloading exposures and controlling risk through managerial oversight and intervention. They are not mutually exclusive. In fact, they often go hand-in-hand.



An obvious way to offload risk is through insurance programs typically designed to address certain types of exposures. These may relate to liabilities that could arise from actions taken (or not taken) such as for potential claims for defective products and for property damage arising from negligence of Acts of God.

Another way to reduce risk is through joint risk-sharing structures or programs. This involves partnering with a third party willing to accept part of the exposure in return for sharing in the upside. This may take the form of a joint venture or some other risk-sharing structure.

Risk mitigation through managerial activity is the most prevalent. This can take many forms. Examples include product quality assurance programs and comprehensive loss prevention systems that can range from such things as employee safety to cybersecurity.

Mitigation strategy related to external, operational, and financial risks are fairly straightforward. Mitigating strategic risk can be complex. For example, how can an organization lessen the exposure arising from failure to execute a critical strategy? Mitigation largely would be through managerial control with active board oversight. For example, the strategy would be broken down into detailed initiatives with specific assigned accountabilities, timelines, milestones, and appropriate reporting, follow up and corrective action systems.

## Response strategies

Response strategies are reactive and are designed to limit the damage to the enterprise following an adverse occurrence. A simple example would be an automotive product recall to repair a defective part.



Well-defined response strategies are critical when there is significant residual exposure after mitigation in financial and/or reputational terms and when the type of response can materially lessen the impact of an occurrence. These are typical crisis situations. They could arise from an external event such as a natural disaster or the loss of a major customer. They can also be self-inflicted such as a food company inadvertently distributing a tainted food product.

Alternative or contingency plans to lessen the exposure and speed recovery are vital in such high-risk situations. While such plans may sit on the shelf and may never be put into action, they will pay huge dividends if an adverse event occurs. The most important aspects of such plans are defining and assigning the authorities and specific tasks to the extent possible. However, since it is almost impossible to anticipate the exact nature of a crisis, prior delegation of decision-making authorities and resource planning are the most important.

Boards should look to management to provide response strategies for very high-impact, residual risks. Those strategies should then be extended to specific risk response plans that are regularly reviewed by senior management and the board.

**The board is likely to identify several risks that are clearly beyond the corporation's control and unable to be fully mitigated. That is to be expected. In these cases, the board should pay particular attention to the ability of the corporation's capital structure to withstand shock. Companies with strong balance sheets are often able to survive critical unanticipated occurrences. Conversely, the bankruptcy courts are littered with companies without the capital structure to withstand unforeseen events.**

## MITIGATION AND RESPONSE STRATEGIES

Exposure	Mitigation Strategy	Response Strategy
<ul style="list-style-type: none"> <li>ineffective strategy development or execution</li> </ul>	<ul style="list-style-type: none"> <li>ongoing formal assessment of success using key performance indicators, external benchmarking, and other early warning tools (see <a href="#">Section 9. Monitoring</a>)</li> <li>focus on rapid corrective actions when objectives are not being met</li> <li>development of alternate strategies and formal contingency planning</li> </ul>	<ul style="list-style-type: none"> <li>formal contingency planning around critical strategies particularly those heavily impacted by variations in assumptions</li> </ul>
<ul style="list-style-type: none"> <li>loss of a major customer</li> </ul>	<ul style="list-style-type: none"> <li>executive-level attention to customer relationships, performance and satisfaction Independent customer surveys</li> <li>accelerated and extensive programs to solicit new customers</li> <li>expansion of critical services not easily replicated by competitors</li> <li>strengthen capital structure to allow the corporation to sustain short-term losses and fund operational restructuring</li> </ul>	<ul style="list-style-type: none"> <li>cost reduction planning</li> <li>stakeholder communication plan – other customers, lenders, investors, employees, vendors</li> </ul>



Exposure	Mitigation Strategy	Response Strategy
<ul style="list-style-type: none"> <li>significant loan covenant violation</li> </ul>	<ul style="list-style-type: none"> <li>tight financial, working capital and operational management, focusing on near-term liquidity</li> <li>heightened executive-level communication with lenders, with early and transparent disclosure of potential risks to covenant compliance</li> <li>expansion of lender base, including off-balance-sheet financing</li> <li>contingency planning including possible asset divestitures</li> <li>long-term capital raising</li> </ul>	<ul style="list-style-type: none"> <li>liquidity contingency planning</li> <li>stakeholder communication plan</li> </ul>
<ul style="list-style-type: none"> <li>unplanned leadership loss</li> </ul>	<ul style="list-style-type: none"> <li>continuous updating of unplanned executive succession plan</li> <li>accelerated executive development programs</li> <li>talent upgrade through selective recruitment (potentially displacing competent but limited potential executives and senior-level managers)</li> </ul>	<ul style="list-style-type: none"> <li>identification of permanent or interim replacements</li> </ul>
<ul style="list-style-type: none"> <li>unforeseen production disruption</li> </ul>	<ul style="list-style-type: none"> <li>manufacturing capacity planning (including green-field sites or acquiring alternate facilities)</li> <li>inventory planning</li> <li>business interruption insurance programs</li> <li>heightened attention to labour matters</li> <li>reciprocal competitor capacity arrangements in the event of certain occurrences (e.g., Acts of God)</li> </ul>	<ul style="list-style-type: none"> <li>contingency planning</li> <li>shift production</li> <li>inventory management</li> <li>stakeholder communications</li> </ul>

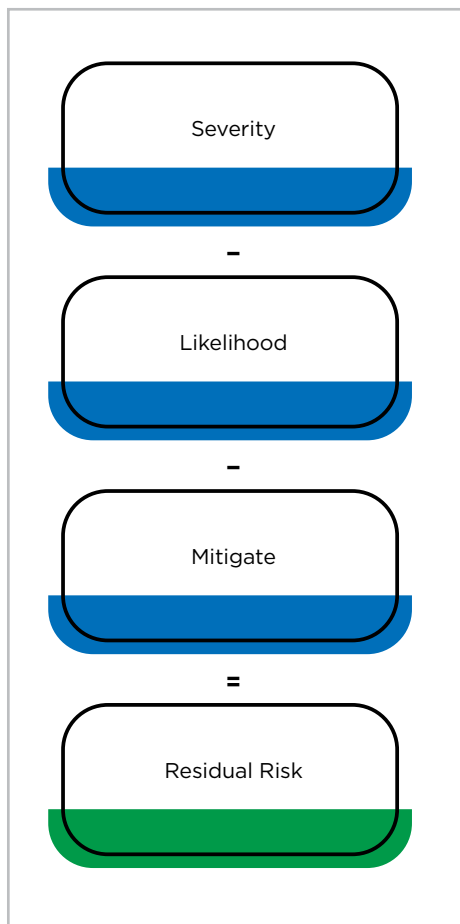
## 5. Initial consequential analysis

### Overview

In overseeing enterprise risk, an initial task is to identify and log the major risks into various categories. The conventional three-stage approach determines the residual exposure for each risk first by assessing and ranking each risk across two dimensions – severity and likelihood of occurrence – then by identifying ways to mitigate the exposures to the higher-rated risks.

### Conventional consequential analysis

In our view, conventional consequential analysis has several flaws in both the sequencing and depth of analysis including:



- The analytical model quantifies material risks and assess the likelihood of their occurrence at the same time. When the probability of occurrence is low, such risks are often dismissed prematurely.
- The model fails to account for risk arising from the time horizon between recognition of the presence of an adverse condition or event and the time available to respond.
- Risks are often addressed in silos rather through an understanding of the interconnectivities and the compounding effect of risks that occur simultaneously, as discussed in the next section.
- Severity analysis fails to fully consider the impact of reputation damage.

We assert that the consequential analytical framework should be expanded to address these deficiencies and include several new dimensions as shown in the next section.

## New model for consequential analysis

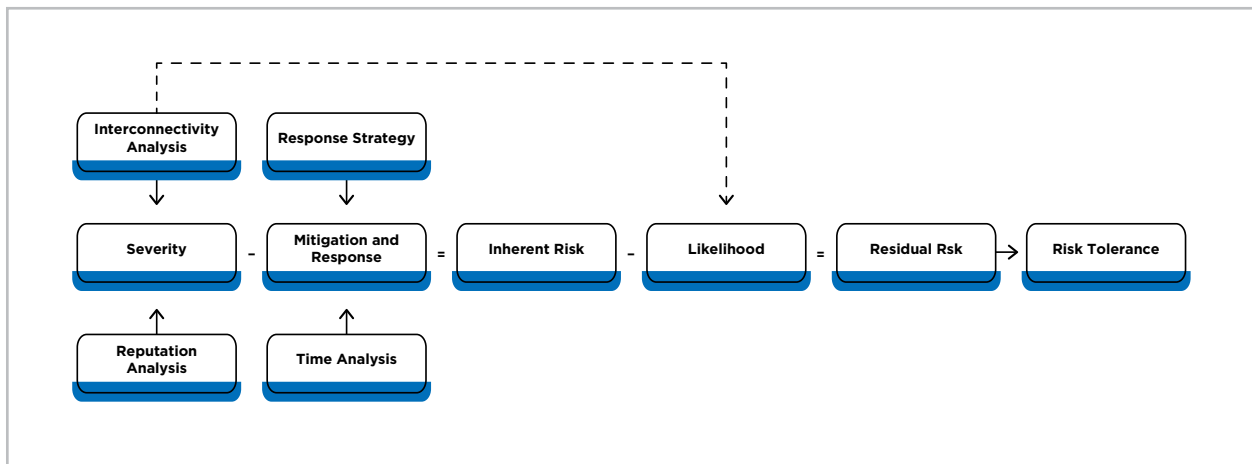
The multiple-stage model set out below is different from the conventional approach in three ways:

1. It adds new elements of analysis – interconnectivity and reputation impact – to the severity analysis and time analysis associated with mitigation.
2. It re-sequences the process to determine inherent risk by considering mitigation before assessing likelihood of occurrence.
3. It adds two additional process steps – considering response strategies as part of mitigation, and comparing residual risk with risk tolerance.

The main goal in adding the additional elements of analysis is to ensure that the resulting analysis of residual risk produces a result that enables the board to focus its efforts on only those risks that:

- threaten viability of the enterprise
- destroy significant asset or shareholder values
- materially affect longer-term performance
- are outside the enterprise's risk tolerance parameters

### NEW MODEL FOR CONSEQUENTIAL ANALYSIS



### Severity of risk

Having identified various types of risk, the first step is to determine the potential materiality of each individual risk. It may be sufficient to classify such risks in categories such as:

- very high - threatens the viability of the corporation
- high - results in a significant degradation in performance or reduced asset valuation
- moderate - could affect results, performance or asset values but not severely
- low - no material effect on the corporation

It is vitally important that boards of directors clearly separate the analysis of the severity of the exposure from the likelihood of an occurrence. The severity of risks should first be calibrated in rank order of impact without regard to possible occurrence, thus capturing material risks before discounting for probability. Rank ordering risks by severity without regard for the likelihood of occurrence helps ensure the board will not dismiss potential major risks prematurely.

Perhaps the most important issue for boards to consider in assessing the impact of an exposure is to consider reputational consequences arising from a specific occurrence. Reputational damage could have a much greater impact on shareholder value and longer-lasting collateral damage than the occurrence itself. For example, the recall of a tainted food product by a food manufacturer can result in a dramatic and punitive effect on market share, revenue, and margins far greater than the cost of the product recall itself and any subsequent litigation. Additionally, depending on the nature and size of the adverse occurrence, the level of effort and cost to rebuild a blemished reputation can be enormous.

A robust consequential analysis should include a broad understanding of the far-reaching impact of a damaged reputation arising from an unanticipated event. From a reputational oversight perspective, boards may wish to focus on four broad areas:

1. identifying potential occurrences that could materially impact the enterprise's reputation
2. quantifying the reputational impact of such occurrences (with particular attention to the interconnectivity analysis)
3. oversight of response strategy, including crisis and related communication planning
4. ongoing monitoring of potential triggering events and preventive measures and processes to address root causes

The severity level may be further adjusted following an interconnectivity analysis set in [Section 6. Interconnectivity analysis](#), below.

### ***Interconnectivity analysis***

One of the flaws in risk analysis is to examine each risk independent of other exposures. Interconnectivity analysis refers to considering the compounding effect of multiple, simultaneous occurrences that fall into three broad scenarios:

1. the compounding effect of interrelated risks
2. the compounding effect of unrelated occurrences that arise simultaneously
3. the impact of a single event combined with several higher-risk conditions that have been present for a considerable period.

Interrelated risks refer to situations in which one negative event arises and triggers one or more other adverse consequences. The compounding impact of several unconnected events occurring concurrently, often referred to as the “perfect storm” is not uncommon. This will be discussed in more detail in [Section 6. Interconnectivity analysis](#), below.



### ***Mitigation and response strategy***

The next step is to determine the degree to which an exposure could be lessened by being proactive and reactive. Mitigations are proactive activities developed to minimize inherent risk prior to an occurrence. Response strategies are steps taken to lower the exposure after the event has occurred. Mitigation and response strategies are discussed in more detail in section 4, Mitigation and response strategy, above.

### ***Time analysis***

Time analysis examines response strategy in terms of the time required to identify and respond to an occurrence. The results of such a time analysis are referred to as “clockspeed.”

Risk clockspeed is a phrase coined by Keith Smith in is described in the 2008 paper titled [Risk clockspeed: a new lens for critical incident management and response](#). It is defined as the rate at which the information necessary to understand and manage a risk becomes available.

Slow clockspeed risks occur with some reasonable forewarning and allow sufficient time to implement a contingency plan whereas fast clockspeed risks are those that tend to emerge unexpectedly with very limited time to react.

Smith argues that with globalization and technological advances, management and boards are called on to make more decisions more quickly, in situations with greater complexity at a less forgiving pace.

We introduce time analysis to assess detection and response time because available response mechanisms can be substantially different. For example, an unexpected and lengthy disruption such as a fire at a key facility can have a major impact on the enterprise and would require an immediate response. Conversely, a potential work stoppage arising from a labour strike can be foreseen and steps taken to maintain operations. The unanticipated loss of key executives, while concerning, may not require an immediate response and can be mitigated with interim appointments while a longer-term solution is sought.

### **Likelihood of occurrence**

Once the inherent risk is determined, the risks should then be classified by the probability that the event or condition will materialize. Again, a high, moderate or low scale should suffice. There is no exact science for assessing likelihood of occurrence. Rather, the board and executives should apply judgment based on history, experience and knowledge of the industry and the enterprise.

It is critically important in assessing probabilities of occurrence that improbable risks be separated from unpredictable exposures and the duration be considered. This is best illustrated by examples. Because a facility may be located in a geographic area that has a history of very infrequent hurricanes, the occurrence in the next two or even five years is highly improbable – although any hurricane that does occur could have severe consequences. That being said, the arrival of a hurricane is highly unpredictable – it could happen at any time. Conversely, a labour disruption arising from failing to complete a new collective agreement when the current agreement expires in three years is highly improbable in the next two years, but that probability and predictability substantially increases in year three.

Importantly, the probability for each risk should be assessed against time parameters. For example, what is the probability of an occurrence in the next two years? How would that probability differ over a five-year horizon?

### **Residual risk**

Residual risk is the net exposure after considering mitigation and responses strategies and applying a discount for probability. This residual risk should be compared with the enterprise's risk tolerance. If the residual risk exceeds tolerance levels, then action must be taken to either lower or eliminate the exposure.

### **Heat mapping**

A simple but useful tool to pictorially prioritize risk along the lines of severity, likelihood, clockspeed, and ability to mitigate is a heat map. This colour-coded model allows boards to focus on critical areas of risk. Obviously, categorizing and ranking risks are not exact sciences; they require subjectivity and judgment. Ranking the top dozen risks in a particular order of importance is not as critical as ensuring they are identified and addressed.

The chart below sets out a heat map example for external, strategic and financial risk in a manufacturing company.

**HEAT MAP**

Risk Category	Severity	Inability to Mitigate	Time Analysis	Inherent Risk	Likelihood	Residual Risk
<b>External Risk</b>						
<b>Competitors lower prices</b>	High	High	Fast	High	Moderate	High
<b>Strategic Risk</b>						
<b>Failure to execute on a new product development road map</b>	High	Moderate	Relatively Slow	High	Low	Moderate
<b>Failure to execute on a critical marketing plan</b>	High	Moderate	Slow	Moderate	Low	Low
<b>Possible opportunistic takeover bid at a depressed value</b>	High	High	Very Fast	Very High	Low	Moderate
<b>Financial Risk</b>						
<b>Failure to attain bank covenant level performance</b>	Very High	Moderate	Relatively Slow	High	Moderate	High
<b>Limited debt capacity and inability to access capital markets</b>	Very High	High	Relatively Slow	High	High	High

## 6. Interconnectivity analysis

### Overview

We assert that when enterprises experience major value destruction or significant underperformance, it is almost never due to a single event. Rather, it is the compounding effect of multiple simultaneous occurrences that fall into three broad scenarios:

1. the compounding effect of interconnected risks
2. the compounding effect of unrelated occurrences that arise at the same time
3. the effect of a single event combined with several higher-risk conditions that have been present for a considerable period

Unquestionably, the most difficult and 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.

Although board members from time to time may lay awake thinking about a so-called “Black Swan” event that could cause catastrophic damage to the enterprise on which they serve as directors, it is probable that far fewer directors share sleepless nights over concerns about underperformance relative to peers and to underdelivery on shareholder value. Whether caused by external factors or self-inflicted, occasionally disastrous events do occur that drive companies into distress or even bankruptcy.

### Risk interconnectivity

Risk interconnectivity relates to the effect of one negative event triggering one or more adverse consequences. To illustrate this phenomenon, consider the BP offshore oil rig explosion. The occurrence of the spill triggered other consequential events including:

- the downgrading of its debt
- a swift liquidation of strategic assets to provide additional liquidity
- a change in leadership
- a severe loss of reputation



### Compounding unrelated risks

The compounding impact of several unconnected events occurring concurrently, often referred to the “perfect storm” is not uncommon. Consider the airline industry.

The airline industry is notorious for encountering the confluence of seemingly unrelated events and conditions such as:

- slowing global economies
- rising fuel prices
- labour dissatisfaction and disruption
- poor weather conditions
- competitive upheaval caused by new entrants into the industry

Finally, we have witnessed many corporate failures triggered by several higher-risk conditions that have been present for years; the occurrence of a single major event constitutes the final blow.

### Embedded vulnerabilities

As stated above, often, several higher risk conditions have been present for years and the occurrence of a single major event constitutes the final blow. This phenomenon may be best illustrated by an extreme example.



The North American auto industry has a long history of failing to adjust strategy in the face of a number of threats. These include:

- newer competition
- an uncompetitive product
- dealership cost structure
- ineffective leadership
- balance sheets over-burdened with debt
- higher labour costs with inflexible collective agreements

However, it was the global economic downturn in 2008 combined with a long list of adverse conditions that sent two of the largest players into bankruptcy and left others in distress. Ironically, these businesses had blue-chip boards of directors and these risks were spelled out in public documents year after year in excruciating detail. On reflection, the demise of the North American auto industry began decades ago.

**Company failures, much like air disasters, usually result from a combination of many factors occurring simultaneously. In the rear-view mirror, the origins of these unfortunate and often disastrous events are painfully apparent.**

### **Governance considerations**

While there is 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.

Failure to understand and evaluate the interconnectivity and compounding effect of risks is a major flaw in the way many boards oversee enterprise risk. It is very typical for boards to assess risks on an individual or case-by-case basis by determining impact, the capability of the enterprise to mitigate or satisfactorily respond to an unfavourable occurrence and the likelihood of occurrence. Many boards fail to assess the linkages of risks or the compounding effect of multiple simultaneous occurrences and existing vulnerabilities.

Although the prospect of thinking through the multiple permutations of risk may appear somewhat daunting, there are several practical perspectives and processes that may be useful for board members to consider. First, be vigilant when examining and trying to understand the interrelationships and compounding effect of multiple risks and occurrences. Second, objectively assess embedded vulnerabilities. Third, to avoid dismissing risks because of the perception of only a remote likelihood of occurrence, first develop the complete list of material risks without regard to probability of incidence. Then complete the re-consequential analysis (including compounding effects) as set out in the next section. Only then should these risks be assessed for likelihood of occurrence. Finally, use financial modeling to stress test the balance sheet in terms of liquidity and financing capacity in light of multiple adverse events.

## Tools to assist boards in analyzing interconnectivities

### Risk universe

Enterprise risk is an entangled subject with no shortage of complexities. Many risk management systems have evolved unwittingly into mind-numbing risk-register spreadsheets, stoplight charts that would rival any rush hour Manhattan street, and obligatory mitigation plans with more form than substance. In light of this, how does a board of directors cut through the tangle to fulfill its risk oversight responsibilities effectively and, importantly, to effect meaningful change that will lower exposures and drive better enterprise performance?

The answer is simplicity itself: Use common sense and create a bias for action.

The starting point is to use simple frameworks and tools to identify and display the meaningful risks on a single sheet of paper. The document would show up to seven categories of risks and a separate classification of embedded vulnerabilities. The seven sets of risks would be comprised of:

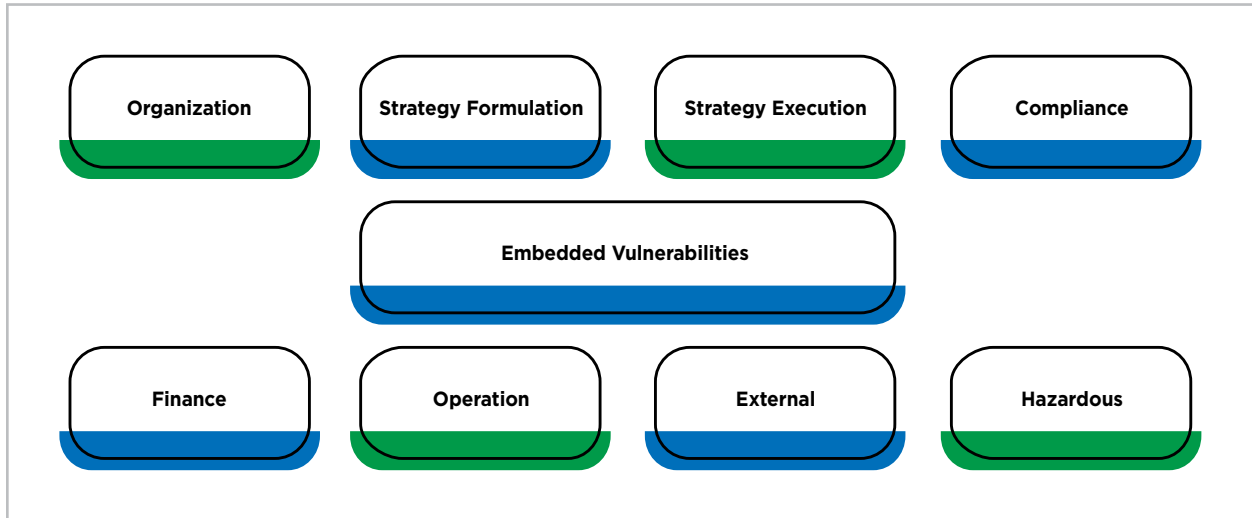
1. strategic
2. financial
3. operational
4. organizational
5. external
6. hazardous
7. compliance

Strategic risks could be separated into two categories:

1. exposures arising from inadequate or ineffective strategy formulation
2. risk of ineffective execution

It is also important to identify embedded vulnerabilities – conditions that are already present within or outside the enterprise's control that increases the severity and/or likelihood of adverse consequences from the occurrence of a risk. An uncompetitive cost position or an overleveraged balance sheet are examples of such vulnerabilities.

## EMBEDDED VULNERABILITIES



From these categorized risks, each exposure should be subjected to the analytical model set out in [Section 5. Initial consequential analysis](#), above.

For those exposures that fall below the board's threshold of perception, directors should be satisfied that management has dynamic systems in place to proactively manage and control those risks and vigilantly track changes in severity, mitigation effectiveness and likelihood.

Those risks warranting board attention along with embedded vulnerabilities should be set out and then subjected to interconnectivity analysis (i.e., whether one occurrence will trigger one or more further incidents that results in increasing consequences).

At this point, directors should have a multi-block list of risks and vulnerabilities condensed on a single page. However, the creation of this holistic material-risk universe on its own should bring cold comfort to the board that it has somehow fulfilled its risk oversight responsibility. In fact, absent board action, the identified risk universe will be rendered only as an interesting, academic exercise.

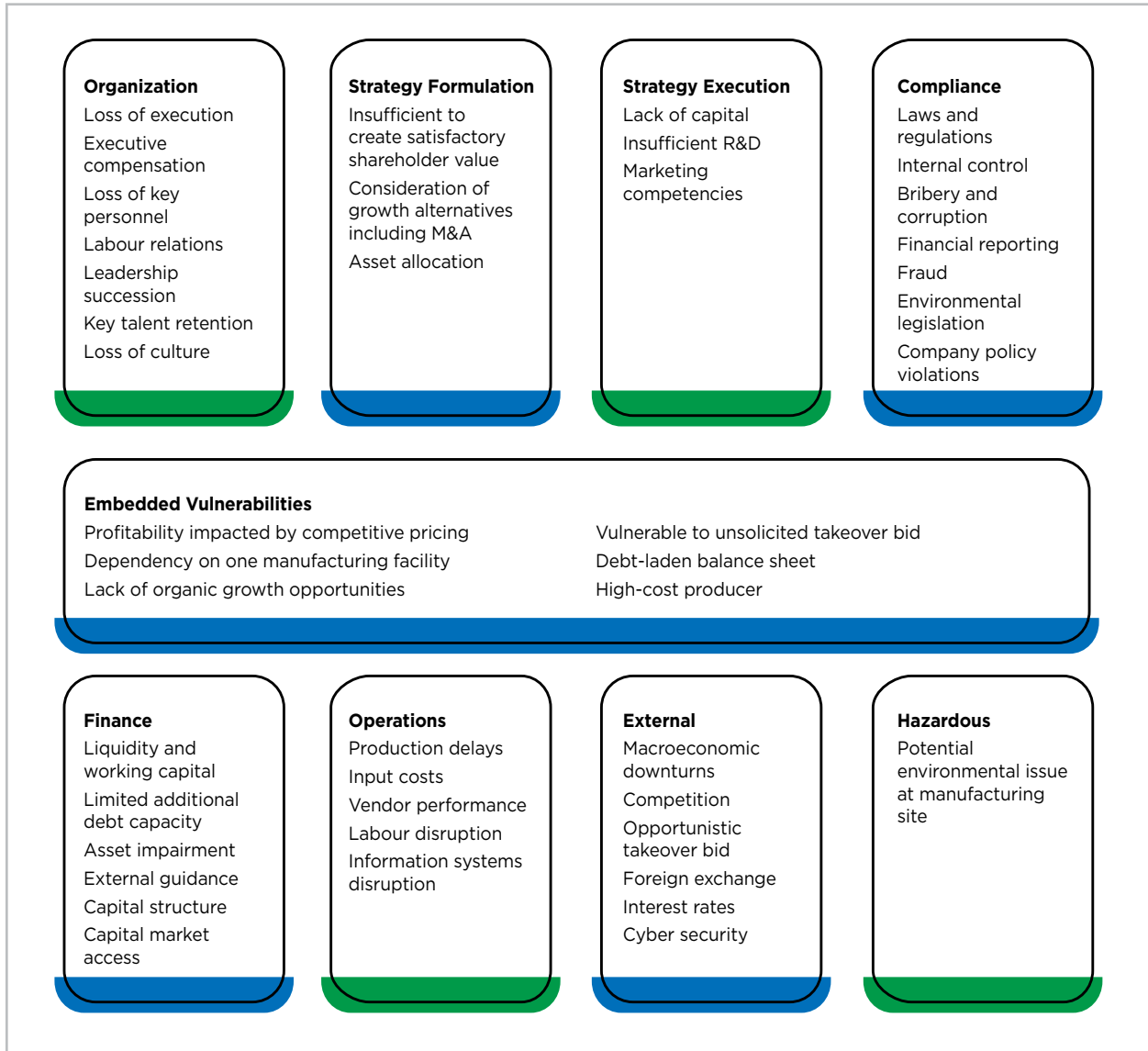
Best practices have directors using this risk universe to help shape the board agenda and tasking management to develop and execute specific initiatives to simultaneously reduce exposures and improve performance. This might involve, for example:

- recasting strategic plans
- acquisitions or divestitures
- accelerating refinancings
- effecting organizational change
- implementing cost containment plans

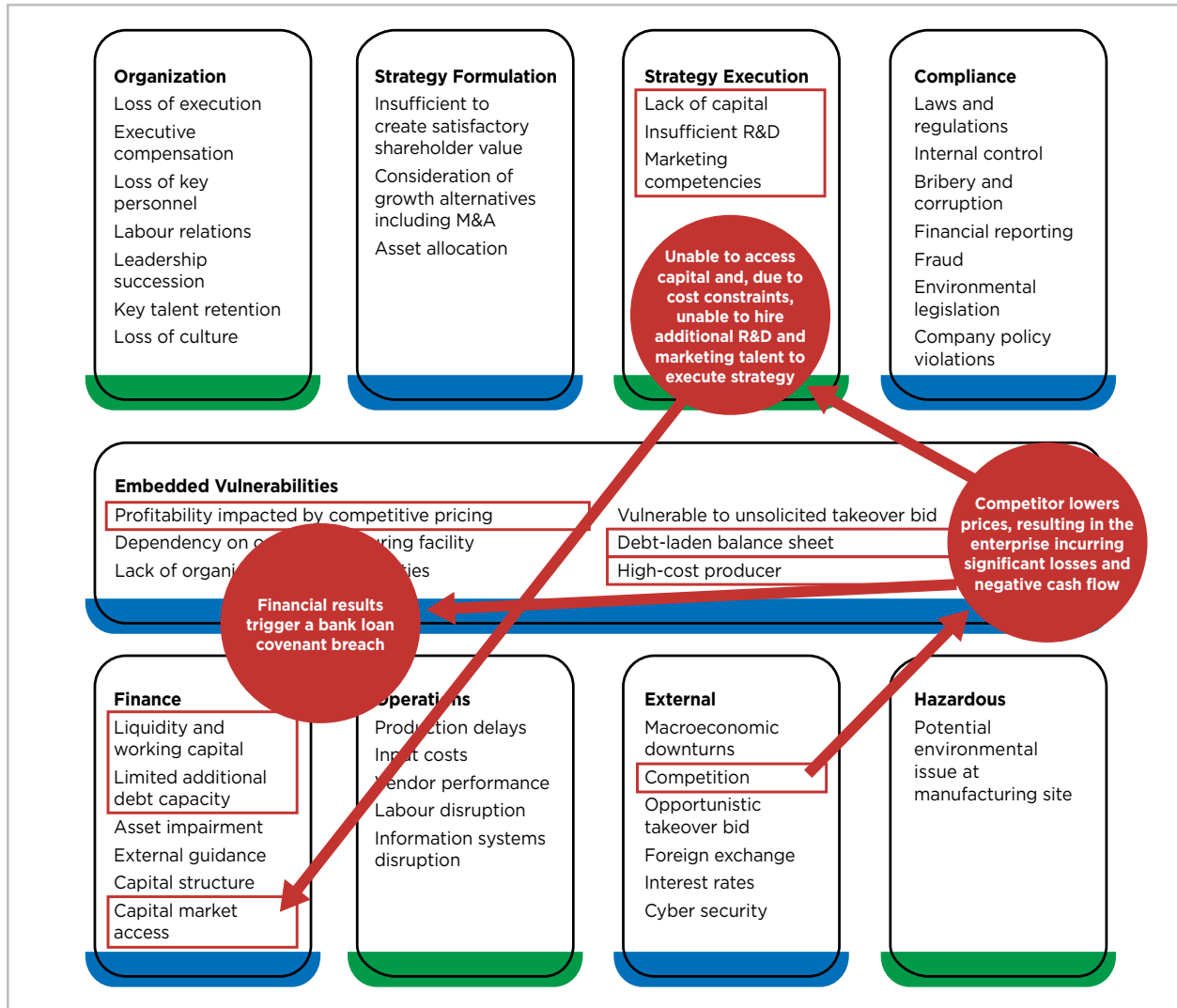
**Example of interconnectivity**

This is the risk universe of a manufacturing company.

**INTERCONNECTIVITY RISKS: RISK UNIVERSE OF A MANUFACTURING COMPANY**



A competitor lowers prices on certain product lines (a recognized vulnerability), resulting in the manufacturing company having to respond by reducing its prices – which lowers margins, triggers a loss and negative cash flow. The manufacturing company has limited debt capacity and because of its performance, it is unable to access capital markets. The prolonged losses trigger a breach of loan covenants and lenders are reluctant to provide a waiver. Because of debt and performance issues, the company is under strict expense constraints, so it is unable to hire sufficient staff to execute on its R&D and marketing strategy.



## 7. Consequential re-analysis

Having reviewed the higher risks in the context of the interconnectivity analysis, performing a re-analysis may determine whether higher-risk categories have a greater impact on the business should they occur at or near the same time. This is also appropriate when two identified higher risks are not overly significant to the corporation on their own but could be when taken together.

This is the heat map example from [Section 5. Initial consequential analysis](#), above, which is the original analysis of exposures.

### HEAT MAP

Risk Category	Severity	Inability to Mitigate	Time Analysis	Inherent Risk	Likelihood	Residual Risk
<b>External Risk</b>						
<b>Competitors lower prices</b>	High	High	Fast	High	Moderate	High
<b>Strategic Risk</b>						
<b>Failure to execute on a new product development road map</b>	High	Moderate	Relatively Slow	High	Low	Moderate
<b>Failure to execute on a critical marketing plan</b>	High	Moderate	Slow	Moderate	Low	Low
<b>Possible opportunistic takeover bid at a depressed value</b>	High	High	Very Fast	Very High	Low	Moderate
<b>Financial Risk</b>						
<b>Failure to attain bank covenant level performance</b>	Very High	Moderate	Relatively Slow	High	Moderate	High
<b>Limited debt capacity and inability to access capital markets</b>	Very High	High	Relatively Slow	High	High	High

Comparing the heat map above with the one below, several things have changed. Although the mitigation and time analysis for each risk is unchanged, the aggregate severity has now increased exponentially because of the interconnectivity of lower competitor prices, which ultimately exposes weaknesses in the enterprise’s debt position which, in turn, increases pressure on executing product development and marketing plans. As well there is increased exposure to a takeover bid because the enterprise value would be under pressure.

Further, because of the domino effect, the likelihood of occurrences has dramatically shifted, most risks to a high or very high category resulting in overall increased residual risks.

**HEAT MAP**

Risk Category	Severity	Inability to Mitigate	Time Analysis	Inherent Risk	Likelihood	Residual Risk
<b>External Risk</b>						
<b>Competitors lower prices</b>	High	High	Fast	High	Moderate	High
<b>Strategic Risk</b>						
<b>Failure to execute on a new product development road map</b>	Very High	Moderate	Relatively Slow	High	High	Very High
<b>Failure to execute on a critical marketing plan</b>	Very High	Moderate	Slow	High	High	Very High
<b>Possible opportunistic takeover bid at a depressed value</b>	Very High	High	Very Fast	Very High	Very High	Very High
<b>Financial Risk</b>						
<b>Failure to attain bank covenant level performance</b>	Very High	Moderate	Relatively Slow	High	Moderate	High
<b>Limited debt capacity and inability to access capital markets</b>	Very High	High	Relatively Slow	High	High	High

For the board of this enterprise, this analysis highlights the exposure to competitor actions because of its vulnerability as a high-cost producer and with high debt exposure.



## 8. Prioritization

### Overview

Having completed the analysis of the various identified, quantified and assessed risks, the next step is to rank the larger risks in order of residual risks after interconnectivity analysis.

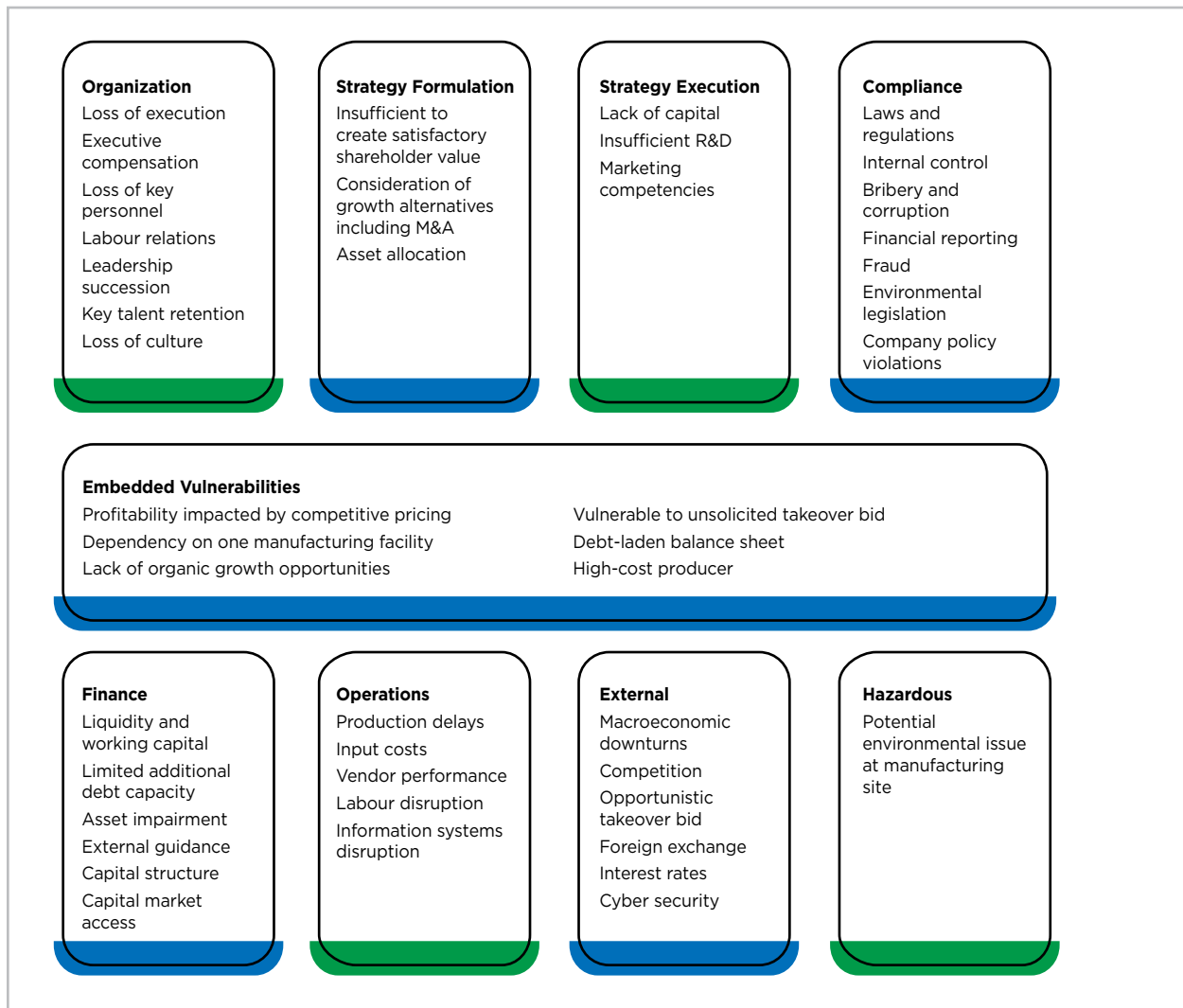
While it is important for boards to understand the breadth of risks facing the corporation, this process allows boards to focus on the most critical risks.

Specific numerical ranking is less important than identifying those risks which, if left untended, could threaten viability of the enterprise, materially destroy asset and shareholder values or significantly affect longer term performance.

### Example of critical risks

This risk universe, which is also shown in [Section 6. Interconnectivity analysis](#), above, represents the critical risks of the business, all worthy of board attention.

#### CRITICAL RISKS OF THE BUSINESS



## Tools to assist boards in prioritizing risks

### *Avoid top 10*

Management will often recommend to the board the enterprise's top 10 risks in a legitimate attempt to simplify and focus efforts on the most significant risks. This sounds right in theory except for one glaring flaw: What if the risk ranked eleventh is also critical?

In our view, shortening the list too far exposes the board to an error of omission. Better to have too many risks on the list than too few. The risk universe example is typical of what the board should expect to see as a final list of risks that should be assessed and monitored at a board level.



## 9. Monitoring

### Overview

The increasing trend in quarterly board materials is stoplight-type graphics to demonstrate the state of the enterprise's risk universe by highlighting areas of increasing exposure. This analysis tends to be superficial in that it can fail to provide sufficient early warning of pending risks and often has limited commentary.

In monitoring risk, there is no substitute for director vigilance for discovering both self-inflicted exposures as well as changes in external conditions. Detailed annual reviews plus the use of specific early warning processes and related metrics can significantly enhance such vigilance.

### Early warning processes

The key to early detection of changes in exposures is the use of appropriate metrics – both leading and lagging indicators. Most organizations focus on the latter (e.g., monitoring results through review of quarterly financial performance). Make no mistake, there is a place for lagging indicators but there are two shortcomings in relying solely on such metrics:

1. By definition, these indicators measure past results and may or may not provide insight into future performance.
2. Root cause analysis is more complex and may not yield the intended conclusions.

The benefit of leading indicators is that they can identify issues early and root cause analysis is relatively simple. In monitoring revenue performance, lagging indicators would include such things as actual revenue versus plan perhaps broken down by product line and jurisdiction.

Typically, variance explanations are often vague – market performance, competitive actions etc. One leading indicator might be sales staff turnover. Higher than planned sales turnover inevitably will result in lower sales because of the time involved to fill vacancies and train new staff. Looking only at revenue statistics will make it extremely difficult to identify sales staff turnover as an important cause of the shortfall in performance. Additionally, monitoring leading indicators should lead to relatively simple root cause analysis and responsive corrective actions.

In our example, the root cause analysis (through exit interviews and other means) of excessive sales staff turnover might include shortfalls in sales commission plans, poor recruitment, inadequate sales training, territorial misalignments, etc.

## Mid-cycle reviews

In [Section 3. Risk tolerance and risk appetite](#), above, we discussed mid-cycle reviews for strategic plans. There is also merit in a similar review of risks. This would involve review of the risk universe and understanding what has changed. These types of reviews will be discussed in [Section 10. Implementation](#).

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.

## Tools to help boards monitor risk

### Early warning indicators

#### EARLY WARNING INDICATORS OF RISK

Risk	Indicator
<b>Strategic</b>	<ul style="list-style-type: none"> <li>linkage to annual operating plan including metrics</li> <li>financial performance</li> <li>market performance</li> <li>product / service sales trends and market share data</li> <li>customer survey results</li> <li>strategic initiatives – post implementation review including M&amp;A</li> </ul>
<b>Financial</b>	<ul style="list-style-type: none"> <li>cash flow performance</li> <li>changes in capital structure – particularly increasing debt</li> <li>updates on capital spending and financing requirements</li> <li>update on debt duration analysis</li> <li>status of capital markets and availability</li> </ul>
<b>Response Strategy</b>	<ul style="list-style-type: none"> <li>leading and lagging indicators</li> <li>operational benchmark data</li> <li>staffing / productivity / turnover statistics</li> <li>capacity utilization</li> <li>product / service cost performance</li> <li>overhead cost trends</li> <li>quality statistics</li> <li>customer satisfaction trends</li> </ul>

Risk	Indicator
<b>Organizational</b>	<ul style="list-style-type: none"> <li>• executive performance</li> <li>• involuntary and voluntary turnover</li> <li>• high performer turnover and exit interview results</li> <li>• periodic talent reviews progress to fill gaps</li> <li>• succession plan execution and staff development</li> <li>• employee engagement data and trends</li> <li>• peer group compensation data</li> </ul>
<b>External</b>	<ul style="list-style-type: none"> <li>• competitive updates</li> <li>• periodic industry updates – external sources</li> <li>• macroeconomic indicators and trends</li> <li>• geopolitical updates</li> </ul>
<b>Compliance</b>	<ul style="list-style-type: none"> <li>• whistleblower activity</li> <li>• communication from regulators</li> <li>• compliance-related litigation</li> </ul>
<b>Hazardous</b>	<ul style="list-style-type: none"> <li>• communication from regulators</li> <li>• internal and external reports</li> <li>• formal studies</li> </ul>

## 10. Implementation

### Overview

Implementing a new board risk oversight process can be daunting but with commitment and a systematic approach it can be affected within a reasonable period. Risk oversight should not be an academic exercise that fulfills a governance requirement. Rather, it should be an important, value-added board responsibility and process. There are two fundamentals to consider. The overall approach should be:

1. practical – non-theoretical
2. premised on improving enterprise performance as well as safeguarding assets and value

### Preconditions for success

#### Board alignment and commitment

The board as a whole must be committed to undertaking risk oversight in a structured and systematic way. Commitment should not be hollow. It means each director should set aside time not just for discussing risk oversight in board meetings but for preparation and ongoing monitoring and observation.

#### Leadership

Unless the board chair and the chief executive officer fully endorse and support formal enterprise risk management and board oversight, the process is doomed from the outset. The reality is that much of the work will be undertaken by senior management. The senior team must view risk management as an important part of its responsibility. The team must understand risk management is value added – not just a theoretical exercise.

#### Embedding risk oversight into the annual board workplan

Risk oversight should be embedded into the board's workplan. Later in this section a structure for board and committee involvement and timeline will be proposed.

#### Adoption of a framework

Whether the board chooses to adopt this *Framework* or another, a defined, detailed framework for risk oversight is critical – otherwise the process migrates to an ad hoc, theoretical process.

### One size does not fit all

Because enterprises have different levels of complexity and available resources, the board should determine a practical approach that meets its needs without overburdening management. For example, smaller, less complex organizations may be able to simplify the consequential risk and interconnectivity analytics if its risk universe is relatively straight forward.

### Board member and management assignment

It is extremely helpful if two individuals are charged with driving the implementation process – one from the board and one from senior management. It does not have to be the board chair and the chief executive officer. For example, one board member may have some experience in risk and is willing to take on the implementation role. Similarly, an executive below the CEO level can be assigned the responsibility. In larger enterprises this would be the chief risk officer; in smaller organizations, someone reporting to the CEO.



### Set a realistic timeline

Using a phased approach as described below is likely to take two to three years for full implementation.

## Board processes

### Planning and assignments

At the outset, the board in conjunction with the chief executive officer should determine the overall approach, timeline, and assignment of responsibilities. This type of planning can also be assigned to the governance committee.

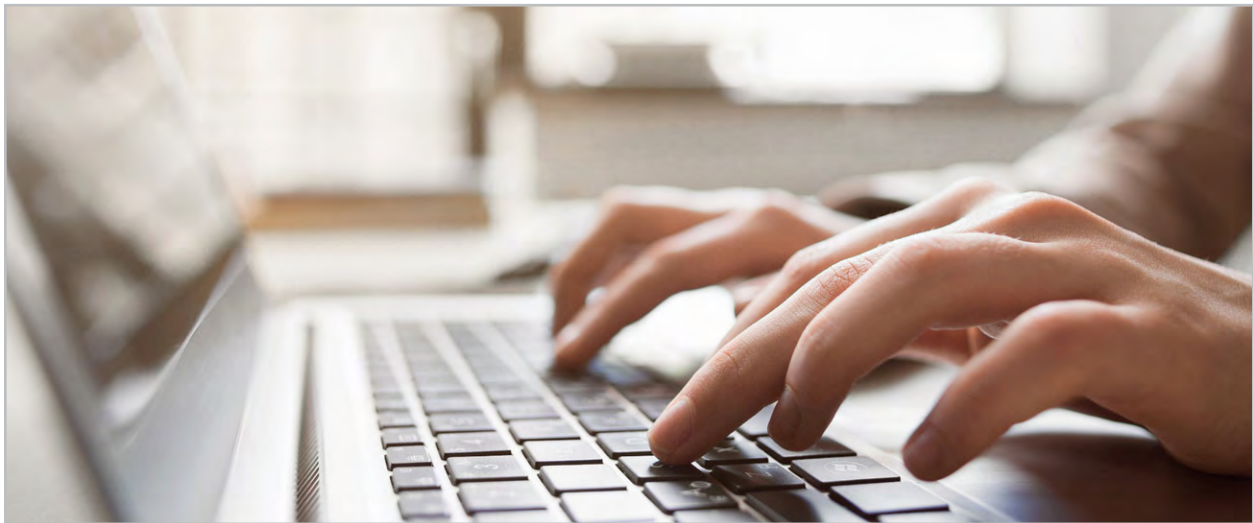
### Board and committee assignments

There is always some debate as to where risk oversight should be assigned. Should it be assigned to a single existing committee, to a separate risk committee or remain as a full board responsibility? There are many governance models; each enterprise should adopt a board assignment model that works for it.

That being said, risk oversight is nevertheless a team activity and the full board must take an active role because the nature of risks requires the full capabilities of the board. To illustrate the point: by assigning total risk oversight to the audit committee, the board becomes reliant on members with financial backgrounds to assess complex exposures such as strategic formulation and execution risk as well as organizational and operational risks – not typical areas where the audit committee has deep experience.

A hybrid model works exceptionally well in most circumstances. While the board has ultimate responsibility for the oversight of enterprise risk, to facilitate a more focused attention on specific risks, the board may delegate certain risk oversight responsibilities to committees while retaining the following responsibilities:

- direct oversight of certain risks
- oversight of committees' activities with respect to risk
- maintaining a current risk universe

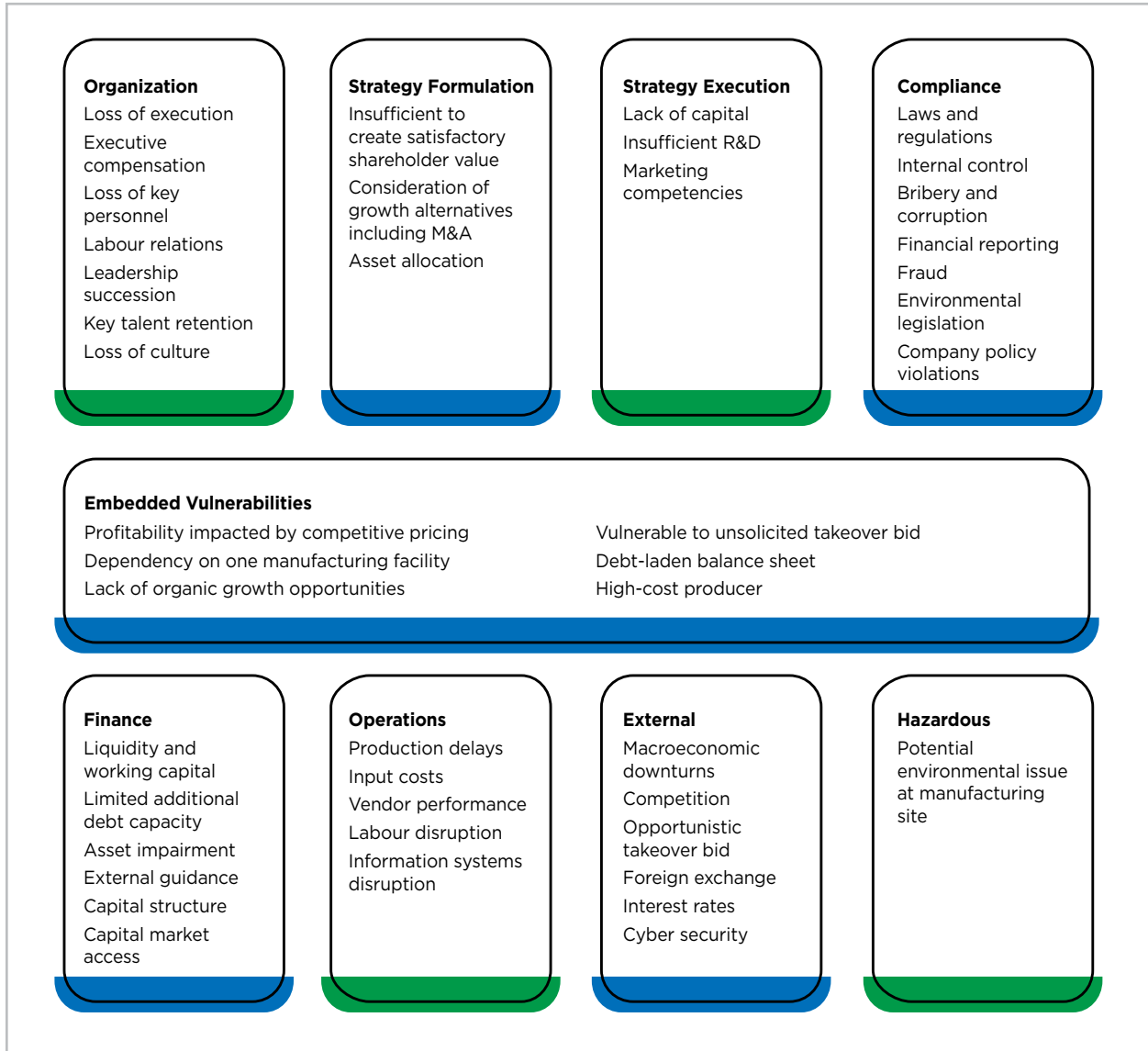




The committees will be responsible for oversight of specific risks as determined by the board. Additionally, the audit committee can be tasked to provide oversight of the enterprise’s risk management system.

It is now possible to look at the risk universe and determine the assignment of risk oversight responsibilities.

**CRITICAL RISKS**



## RISKS TO REMAIN THE RESPONSIBILITY OF THE FULL BOARD

Risk Type	Risk
<b>Strategic</b>	<ul style="list-style-type: none"> <li>• formulation</li> <li>• insufficient to create satisfactory shareholder value</li> <li>• consideration of growth alternatives including M&amp;A</li> <li>• asset allocation</li> <li>• lack of capital</li> <li>• insufficient R&amp;D and marketing competencies</li> </ul>
<b>Operational</b>	<ul style="list-style-type: none"> <li>• production delays</li> <li>• input costs</li> <li>• vendor performance</li> </ul>
<b>External</b>	<ul style="list-style-type: none"> <li>• macroeconomic downturns</li> <li>• competition</li> <li>• opportunistic take-over bid</li> </ul>
<b>Organization</b>	<ul style="list-style-type: none"> <li>• CEO succession</li> </ul>
<b>Compliance</b>	<ul style="list-style-type: none"> <li>• bribery and corruption</li> <li>• environmental legislation</li> </ul>
<b>Hazardous</b>	<ul style="list-style-type: none"> <li>• potential environmental issue at manufacturing site</li> </ul>
<b>Vulnerabilities</b>	<ul style="list-style-type: none"> <li>• profitability impacted by competitive pricing</li> <li>• dependency on one manufacturing facility</li> <li>• lack of organic growth opportunities</li> <li>• vulnerable to unsolicited takeover bid</li> <li>• high cost producer</li> </ul>

## RISKS TO BE ASSIGNED TO THE AUDIT COMMITTEE

Risk Type	Risk
<b>Strategic</b>	<ul style="list-style-type: none"> <li>• liquidity and working capital</li> <li>• limited additional debt capacity</li> <li>• asset impairment</li> <li>• external guidance</li> <li>• capital structure</li> <li>• capital market access</li> </ul>

Risk Type	Risk
<b>Operational</b>	<ul style="list-style-type: none"> <li>• information systems disruption</li> </ul>
<b>External</b>	<ul style="list-style-type: none"> <li>• foreign exchange</li> <li>• interest rates</li> <li>• cyber security</li> </ul>
<b>Organization</b>	<ul style="list-style-type: none"> <li>• financial leadership succession</li> </ul>
<b>Compliance</b>	<ul style="list-style-type: none"> <li>• internal control</li> <li>• financial reporting</li> <li>• fraud</li> <li>• laws and regulations as they relate to finance</li> </ul>
<b>Hazardous</b>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
<b>Vulnerabilities</b>	<ul style="list-style-type: none"> <li>• debt-laden balance sheet</li> </ul>

#### RISKS TO BE ASSIGNED TO THE HUMAN RESOURCES AND COMPENSATION COMMITTEE

Risk Type	Risk
<b>Organizational</b>	<ul style="list-style-type: none"> <li>• loss of executives</li> <li>• executive compensation</li> <li>• loss of key personnel</li> <li>• labour relations</li> <li>• leadership succession</li> <li>• key talent retention</li> <li>• loss of culture</li> </ul>
<b>Operational</b>	<ul style="list-style-type: none"> <li>• labour disruption</li> </ul>
<b>External</b>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
<b>Organization</b>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
<b>Compliance</b>	<ul style="list-style-type: none"> <li>• laws and regulations as they relate to human resources</li> </ul>
<b>Hazardous</b>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
<b>Vulnerabilities</b>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>

## RISKS TO BE ASSIGNED TO THE GOVERNANCE COMMITTEE

Risk Type	Risk
<b>Organizational</b>	<ul style="list-style-type: none"> <li>board succession</li> </ul>
<b>Strategic</b>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
<b>Operational</b>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
<b>External</b>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
<b>Financial</b>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
<b>Compliance</b>	<ul style="list-style-type: none"> <li>laws and regulations</li> <li>company policy violations</li> </ul>
<b>Hazardous</b>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
<b>Vulnerabilities</b>	<ul style="list-style-type: none"> <li>N/A</li> </ul>

**Build into committee mandates and annual agendas**

To ensure each risk is subject to oversight, the board and committee mandates that annual workplans should be reviewed and amended accordingly. Note that each exposure need not be captioned as a “risk.” For example, because review of oversight of the internal control environment is already part of the audit committee’s mandate, it is unnecessary to add a separate caption to include the word “risk.”

**Reporting to the board**

The committee should report to the board its oversight of risks as they are reviewed in accordance with the annual calendar. Additionally, once annually the committee should present to the board all assigned risks summarized and ranked by severity and residual risk.

Risk interconnectivity would be a board level responsibility.

**Define monitoring metrics by key risk and executive assignments**

The individual risks assigned to the full board and committees (including a preliminary analytical assessment) are to be reviewed. This would entail examining the analytics to determine residual risk, mitigation planning, monitoring, and establishing metrics that would be included in board and committee materials. For each risk, the board and committee would establish the appropriate monitoring activities as well as frequency of review.

For each risk, a management member would be assigned to work with the board or committee to determine residual risk, mitigation, and the response strategy as well as monitoring metrics.

### Reviews

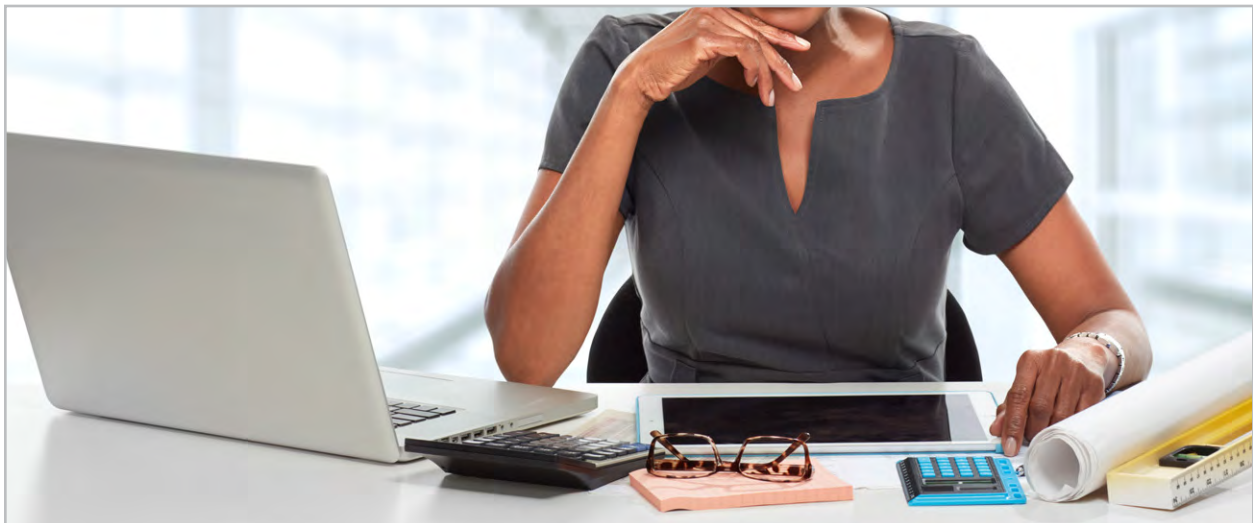
It is useful for the board to receive from management a quarterly update on risks. Rather than look at mind-numbing stoplight charts, a simple one-page commentary on which risks have changed – either heightened or lessened – is far more beneficial.

Periodic deep dives into specific risks by the full board or committee are recommended if the exposure's severity or likelihood has elevated. A full review of strategic risks after the strategic plan has been presented is also useful.

### Validation of ERM processes, mitigation and response strategies

Internal audit can play a valuable role for the board by providing a comprehensive review of the enterprise risk management system. Is it designed and functioning as intended?

Internal audit can verify that the mitigation and response strategies are actually in place.



### Separate risk committee

Separate risk committees would be used only in unique circumstances. For example, this is a requirement for financial institutions, but the scope of such committees is typically limited to financial-type exposures.

## Phased implementation approach

### Phase 1

#### *Define board level risk oversight parameters*

It is not uncommon for an enterprise to identify one hundred or more risks. How does a board determine which risks merit board attention and which do not? This determination involves setting parameters. The board provides oversight on all risks that potentially could threaten the viability of the enterprise, expose the enterprise to material asset or shareholder value destruction or result in significant underperformance as defined by the board.

#### *Preliminary key risk universe and embedded vulnerabilities*

Based upon the parameters discussed above, determine a preliminary risk universe by risk category and an initial list of embedded vulnerabilities. Ideally this can be set out in a single page. Typically, this list would be based on severity only, without regard to mitigation and probability analysis. This will be refined in Phase 2.

#### *Determine board processes*

Determine the overall approach, timeline and board and committee responsibility assignments, including mandate modifications, workplan adjustments and reporting mechanisms.

#### *Define information requirements for each risk*

For each exposure in the preliminary risk universe, determine what information is required to understand the risk. As an illustration, here is an example of what might be required for competitive risk:

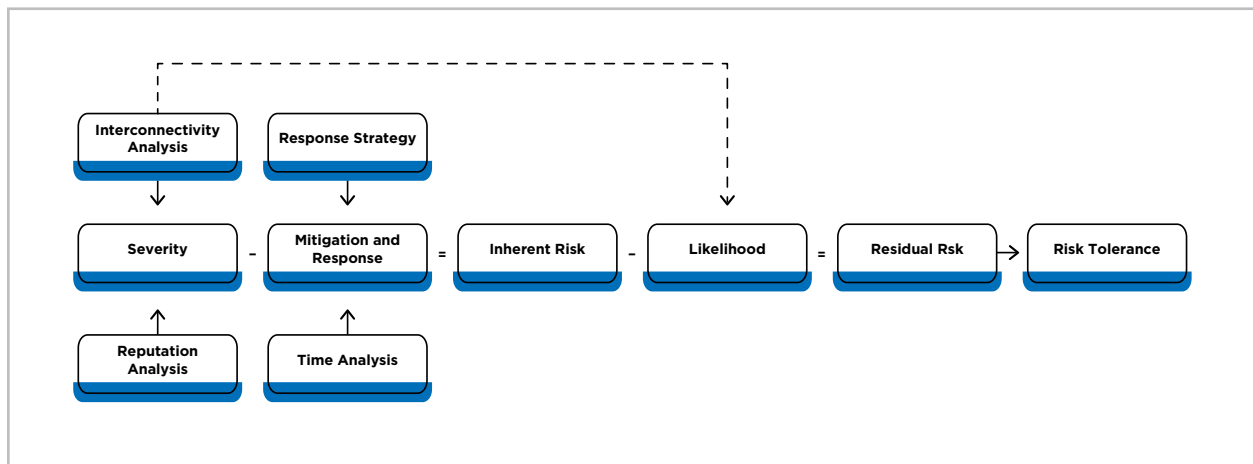
- Determine relative size and market position.
- Summarize key strategies and major initiatives.
- Analyze comparative business models.
- Review results of customer surveys, including those for competitor customers.
- Review comparative financial analysis and provide an assessment of reasons for performance differences.
- Compare competitive advantages and disadvantages against key drivers.
- Compare competitor breadth of capabilities.

## Phase 2

### *Detailed consequential analytics*

Define risk tolerance and risk appetite by examining each high residual risk. Using this model, determine the residual risk for each exposure.

#### MODEL FOR DETERMINING RESIDUAL RISK



### *Perform interconnectivity and compounding analysis*

Using the preliminary risk universe, complete a re-consequential analysis after examining risk interconnectivity and compounding impacts.

### *Refinement of the risk universe*

Based upon the re-consequential analysis, refine the risk universe.

### *Define monitoring metrics and reporting*

Determine early warning indicators and other monitoring metrics and analytics as well a validation methodologies and reporting. Embed metrics into quarterly board and committee packages.

## Phase 3

### *Complete first mid-cycle review*

Based on the first mid-cycle review, determine the required refinements to the risk universe, analytics and board processes.

# Final Thoughts

Effective board oversight of risk requires rigour, objectivity, a heightened sense of risk's importance, and, most importantly, the recognition that unforeseen events and circumstances can and often do occur. Progressive boards will keep a watchful eye and a finely tuned antenna 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. They will also be prudent and conservative when setting capital structure parameters.

Above all, members of progressive boards will have the courage and conviction to raise unpopular or seemingly remote risks and their fellow directors will have the discipline and enlightenment to listen and assess an appropriate response.



When the consequences of the compounding effect of several risks occurring at once turn into reality, the board will be judged to have 20/20 hindsight. Boards that dismiss risks too quickly because they are unlikely to occur will find their own reasoning equally dismissed by shareholders after the fact



# Where to Find More Information

## Select CPA Canada corporate oversight and governance resources

Caldwell, J. & Smith, K. (2015). [\*Overseeing Mergers and Acquisitions: A Framework for Boards of Directors\*](#)

Caldwell, J., & Smith, K. (2015). [\*Overseeing Strategy: A Framework for Boards of Directors\*](#)

CPA Canada (2018). [\*Annual Assessment of the External Auditor: Tool for audit committees\*](#)

CPA Canada (2018). [\*Audit Committee Guide to Audit Quality Indicators\*](#)

CPA Canada (2020). [\*Climate Risk: Is it on your radar?\*](#)

CPA Canada (2019). [\*Cybersecurity: Is it on your radar?\*](#)

CPA Canada (2020, 2019). Disruptive governance podcast series

- ***Risks of Dysfunctional Boards: In Conversation with Tom O’Neill (in memory) and John Caldwell***  
Apple Podcast | Google Podcast | Spotify  
View the podcast transcript on the risks of dysfunctional boards.
- ***The Board’s Role in Risk Oversight: In Conversation with Tom O’Neill and John Caldwell***  
Apple Podcast | Google Podcast | Spotify  
View the podcast transcript on the board’s role in risk oversight.
- ***Sustainable Finance: In Conversation with Tiff Macklem and Andy Chisholm***  
Apple Podcast | Google Podcast | Spotify  
View the podcast transcript on sustainable finance.

CPA Canada (2020). [\*Embracing Uncertainty: Planning for resilience in a post-COVID-19 world\*](#)

CPA Canada (2020). [\*Insolvency: Is it on your radar?\*](#)

CPA Canada (2017). [\*Key Performance Indicators: Tool for audit committees\*](#)

CPA Canada (2019). [\*Oversight of the External Auditor: Guidance for audit committees\*](#)

CPA Canada (2018). [\*Periodic Comprehensive Review of the External Auditor: Tool for audit committees\*](#)

CPA Canada (2021). [\*Supply Chain Security in Uncertain Times: Questions a board should ask\*](#)

CPA Canada (2018). [\*The Business Impact of Environmental and Social Issues: Is it on your radar?\*](#)

Smith, K. (2010). *Risk clockspeed: An introduction to risk clockspeed*

Willis, A. (2020). [\*Environmental and Social Risks and Opportunities: Questions directors should ask\*](#)

Willis, A. & Keyes, S. (2017). [\*Climate Change Briefing: Questions directors should ask\*](#)

Wilson, R. (2019). [\*20 Questions Directors Should Ask About Cybersecurity\*](#)

## **Additional references**

COSO. (2017). [\*Guidance on Enterprise Risk Management\*](#)

Nassim, N. T. (2010). *The Black Swan: The Impact of the Highly Improbable* (2nd ed.).

Ontario Securities Commission. (2005). [\*National Policy 58-201, Corporate Governance Guidelines\*](#)

PwC. (2021). [\*Risk Oversight Series\*](#)

World Economic Forum (2021). [\*The Global Risks Report 2021\*](#)

# About the Author

## **John E. Caldwell, B. Comm, CPA**

Currently, John is the chair of the board for Advanced Micro Devices Inc., a world leader in semiconductors for computing and consumer electronics. He is also a director of Faro Technologies, Inc., the world leader in three-dimensional manufacturing measurement systems; IAMGOLD, a leading mid-tier gold mining company; and is chair of the board of Samuel Son & Co Limited, one of the largest North American metal processors and distributors and industrial manufacturers. Currently he serves on four audit committees, chairing one; four corporate governance committees, chairing two; and two compensation committees.

John has extensive executive-level and board experience, having served as a chief executive officer in three advanced technology public companies for more than 18 years. Throughout his career, he has served on a total of 13 boards of directors. He also has a background in finance, having served as a chief financial officer of two public companies.