



operational risk and resilience

understanding and minimizing operational
risk to secure shareholder value

Chris Frost • David Allen • James Porter • Philip Bloodworth

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FOR EVERY TITLE THAT WE PUBLISH, BUTTERWORTH-HEINEMANN
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Foreword

This book is about ‘rethinking’ traditional ideas and practices in the area of operational risk management. It is also about ‘rethinking’ the nature of risk, risk management, and operations management in general. Its aim is to raise awareness of a relatively new area of management focus – operational risk management – and offer practical solutions that will help managers walk the fine line between success and failure as we move into the twenty-first century.

In the 1980s and 1990s, much of the focus in risk management circles revolved around designing and implementing control frameworks, managing insurance portfolios and meeting corporate governance standards following the increased attention focused on corporate governance and the publication of the Greenbury, Cadbury and later the Hampel reports.

In certain industries, a great deal of attention has been given to the identification and elimination of risk. In the nuclear sector, for example, the consequences of failure were known to be so catastrophic that the prospect of failure was seen to be unacceptable. As a result, risk management experts in the industry developed new approaches to the quantification of risk, but often in narrowly focused areas that were not directly relevant elsewhere. In the financial sector, considerable attention has been placed on the management of credit and market risk. Across global financial markets, complex mathematical models are used to calculate the extent of potential risk exposures.

As the pace of change continues to accelerate, many organizations are now finding that they can no longer afford to take a solely defensive attitude to risk. While control frameworks are a necessary first step in managing risk, many organizations now need to manage risk for strate-

gic advantage, to improve customer satisfaction and increase shareholder value. In the trading rooms around the world, one of the primary goals of risk management is to guide the process of risk-taking by traders.

The aim of operational risk management is to help organizations achieve their strategic goals. By its nature, operational risk management is the integration of risk management with core operations management. As well as offering a structure for designing and implementing controls that support business objectives, operational risk management can also help ensure that organizations deliver shareholder value. Risk management and corporate strategy are becoming more closely aligned than ever before.

The aim of this book is to help managers achieve two objectives:

- to implement (an appropriate) control structure aligned with business objectives; and
- to use operational risk management as a tool to improve service delivery.

In Chapter 1, the authors introduce the subject of operational risk management and examine why it is seen as an area for attention today. In particular, they examine the wider business context in which effective operational risk management is becoming paramount for many organizations today.

Chapter 2 examines different ways of establishing operational risk frameworks designed to help managers achieve operational integrity. Following the increasing pressure from regulators for management to focus on risks and control (e.g. the recent Turnbull Report published in the UK, as discussed in Chapter 4), this has become even more of a priority for organizations. In other countries, similar corporate governance initiatives have put organizations under pressure to implement more structured risk management frameworks.

In Chapter 3, we examine how organizations can use operational risk management to improve the delivery of their products and services to the market, as well as the chances of success of new projects. We show that by building ‘resilience’ in operations, organizations can better deliver their product or service to their customers, increase customer satisfaction and ultimately, increase shareholder value.

Finally, Chapter 4 takes a look at aspects of the management of operational risk that are becoming increasingly important as we move into the twenty-first century:

- operational risk management in the financial sector; and
- how organizations can increase their chances of success in new business areas, such as electronic business.

There is no ‘one size fits all’ solution, however. Although managers across industry sectors face many common goals from needing to improve customer satisfaction to the need to generate shareholder value, we know that organizations in different sectors face different risks. The authors of this book have set out to describe a number of approaches to this end. The challenge for all of us is to learn from the past and to use that knowledge to build the future.

References

Cadbury Report: Report of the Committee on the Financial Aspects of Corporate Governance, Gee Publishing Ltd, 1 December 1992.

Greenbury Report: Directors’ Remuneration – A Report of a Study Chaired by Sir Richard Greenbury, Gee Publishing Ltd, July 1995.

Hampel Report: The Committee on Corporate Governance, Gee Publishing Ltd, January 1998.

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Risk management overview

Introduction to operational risk management

At a macro-level, a country's economy is dependent on processes in government, industrial, service and infrastructure sectors running smoothly and efficiently. When they do not – for example, as a result of natural disaster, industrial action or a major financial crisis – an economic price is paid in terms of lost competitiveness, increased running costs, lower future growth expectations, unemployment or even recession.

At a micro-economic level, individual organizations also face the risk that their activities and processes may be disrupted unexpectedly or fail to meet expected performance levels. Recent high profile failures – Barings, Piper Alpha and Exxon Valdez – have focused attention at every level on the importance of risk management. The consequences of failures and disruption on performance may be more or less severe – running from minor losses arising from processing backlogs, reduced customer service quality, loss of reputation, and in the extreme, to bankruptcy.

What is clear at a boardroom level is that strong risk management is an essential part of good corporate governance and something that helps to protect shareholder value. There is also a growing recognition of the need to ensure that an effective framework of management controls and supervision is in place. This view is reflected in the attention that is being placed

on risk management by regulators and listing authorities around the world.

The aim of operational risk management – the subject of this book – is to ensure that the varied exposures to operational risk faced by an organization are identified and addressed in the most efficient way possible. The achievement of this goal is dependent on management taking positive actions to consider what steps should be taken to optimize an organization's exposure to operational risk so that shareholder value gains can be maximized.

The scope of operational risk management at the highest level can be broken down into two main components:

- operational integrity – the adequacy of operational controls and corporate governance; and
- service delivery – the organization's ability to perform business processes on an ongoing basis.



Figure 1.1 Components of operational risk management

There may be many interdependencies between these two core components – for example, a derivatives loss in a bank caused by illegal trading in an environment with poor operational controls may also be the result of poor human resource management.

They may also be considered separately. Operational integrity generally encompasses the management of operational risks stemming from inappropriate cultural environments, lack of management supervision, errors, malice, fraud, poor health and safety and environmental compliance failures, physical disasters, and poor internal controls. Operational delivery covers the management of risks in unexpected sources in demand business operations, processes, failed projects change, supplier relationships, delivery, personnel, IT, premises and plant, and crises.

The evolution of risk management

Traditionally, there have been two strands to corporate risk management: financial and insurance. These risks are managed in different parts of an organization: insurance matters are dealt with by the insurance or risk manager, while the corporate treasurer or finance director has responsibility for financial risk management.

Over the years, risk management has had to evolve with the times. In the 1970s, risk managers started to pay more attention to active risk control and risk management started to become more proactive than in the past. On the financial side, they saw a need to hedge against increasing economic volatility in the shape of fluctuating currency and commodity values. New financial derivatives markets were born, and the discipline of financial risk management took off in corporate treasury departments and