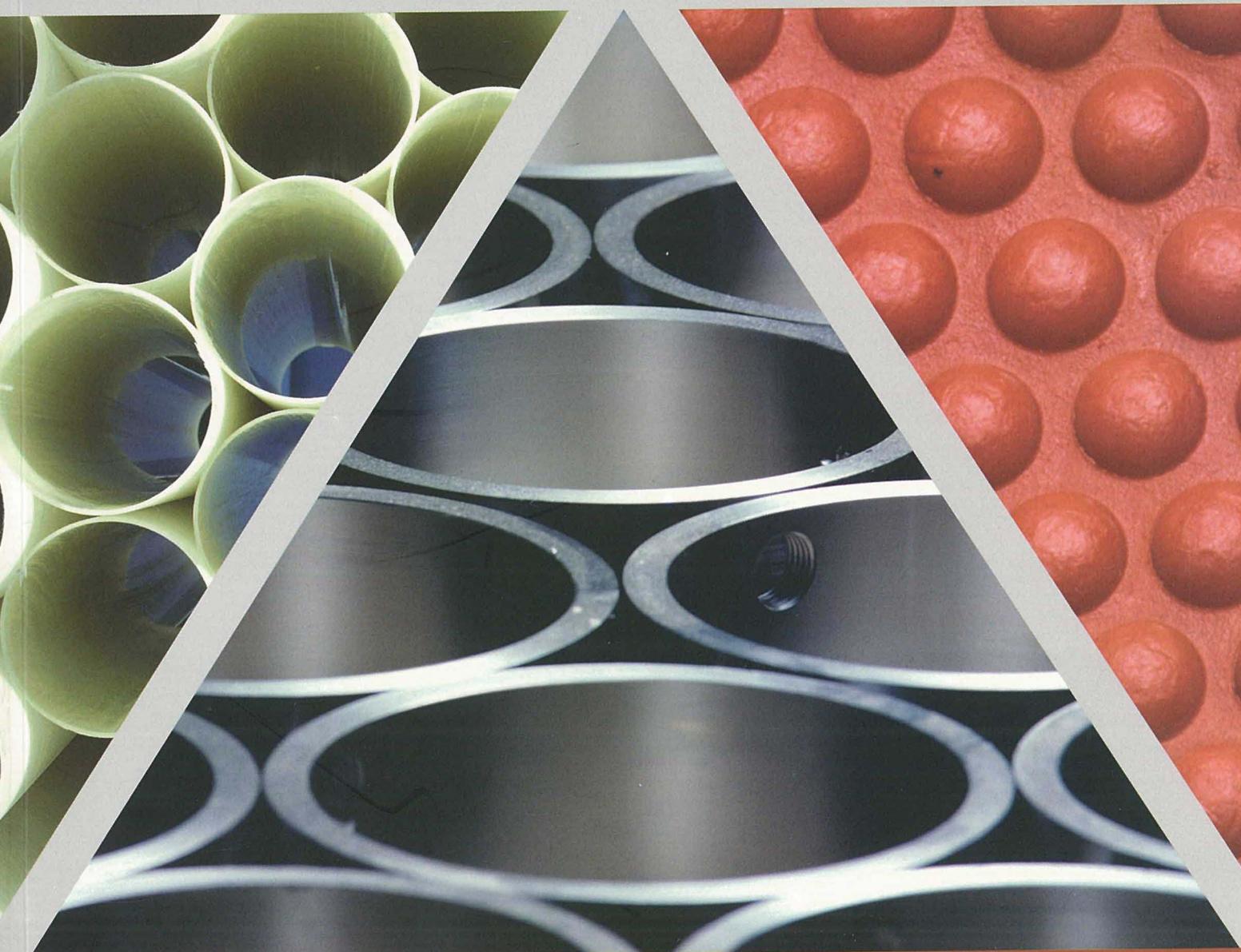


# MANAGEMENT ACCOUNTING: STRATEGIC DECISION MAKING, PERFORMANCE AND RISK

2nd edition

Chris Hunt, Carolyn Fowler and Lyndal Drennan



# **Management Accounting:**

**Strategic Decision Making, Performance and Risk  
2nd Edition**

**Chris Hunt  
Carolyn Fowler  
Lyndal Drennan**

[www.pearsoned.co.nz](http://www.pearsoned.co.nz)

Your comments on this title are welcome at  
[feedback@pearsoned.co.nz](mailto:feedback@pearsoned.co.nz)

Pearson  
a division of Pearson New Zealand Ltd  
67 Apollo Drive, Rosedale, Auckland 0632, New Zealand

Associated companies throughout the world

© Pearson 2013  
First published in 2013

ISBN: 978 1 4425 6129 8

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of the publisher.

Any Internet addresses (URLs) provided for this book/resource were valid at the time of publication and chosen as being appropriate for use as an education research tool. However, due to the dynamic nature of the Internet, some addresses may have changed, may have ceased to exist since publication, or may inadvertently link to sites with content that could be considered offensive or inappropriate. While the authors and publisher regret any inconvenience this may cause readers, no responsibility for any such changes or unforeseeable errors can be accepted by either the authors or the publisher.

This Pearson Originals edition has been published directly from the editor's manuscript in order to get the book to you as soon as possible. It has not gone through the rigorous editorial and production processes normally afforded to Pearson titles. While every effort has been made by the authors to ensure the accuracy of the text, Pearson does not take responsibility for the editorial quality of this edition.

Produced by Pearson  
Printed in Malaysia via Pearson Malaysia (CTP-PPSB)

# Strategic Decision Making, Performance Management and Risk in Management Accounting

<b>Chapter 1</b>	<b>Introduction – management accounting and its environments</b>	<b>1</b>
	1 Establishing an environmental context	1
	2 Choice of a strategy focus through a business risk lens	2
	3 Strategies and objectives	4
	4 Strategy choice and decision-making	11
	5 Strategy-based accounting	12
	6 Customer, supplier and organisational value and its strategic management	14
	7 Chapter summary	15
	8 Chapter questions	16
	9 References and other research readings	18
<b>Chapter 2</b>	<b>Towards strategy-based accounting: value chains, target costing and life-cycle reporting</b>	<b>21</b>
	1 Introduction	21
	2 Strategic management accounting (SMA), strategic cost management (SCM) and value chain analysis	23
	3 Life-cycle costing, budgeting and reporting	28
	4 Target pricing and costing	31
	5 A change in focus: strategy-based accounting (SBA)	32
	6 Strategy-based value chain (SBVC)	36
	7 Chapter summary	39
	8 Chapter questions	39
	9 References and other research readings	45
<b>Chapter 3</b>	<b>Activity-based costing, management and risk</b>	<b>47</b>
	1 Introduction	47
	2 Establishing an environmental context	47
	3 The internal and external environmental risk management process and activity-based costing	48
	4 Activity-based costing (ABC)	50
	5 Time-driven ABC and Simplex Limited	61
	6 Activity-based management (ABM)	65
	7 Chapter summary	66
	8 Chapter questions	67
	9 References and other research readings	74
<b>Chapter 4</b>	<b>Strategic decision-making, resourcing and risk management</b>	<b>77</b>
	1 Introduction – strategic choice in a risk environment	77
	2 Short-term decision-making	79
	3 Traditional capital budgeting	83
	4 Strategic decision-making	89
	5 The resourcing implication of a strategic focus: constrained resources and the Theory of Constraints	91
	6 Strategically-focused risk-enhanced decision-making	97
	7 Chapter summary	102
	8 Chapter questions	103
	9 Appendix: present value tables	109
	10 References and other research readings	110

<b>Chapter 5</b>	<b>Human resources value, growth and risk management</b>	<b>113</b>
1	Introduction	113
2	Human resources growth	116
3	Succession planning, loyalty, training and development	117
4	Compensation, incentives and rewards	120
5	Empowerment and innovation	123
6	Strategic risk and human resource management	127
7	Chapter summary	128
8	Chapter questions	128
9	References and other research readings	130
<b>Chapter 6</b>	<b>Structural choices, transfer pricing and risk management</b>	<b>133</b>
1	Introduction	133
2	Structural choices: centralisation versus decentralisation	135
3	Transfer pricing from a domestic and an international view	138
4	Transfer pricing, strategy and risk management	149
5	Chapter summary	152
6	Chapter questions	153
7	References and other research readings	159
<b>Chapter 7</b>	<b>Customer value, profitability and risk management</b>	<b>161</b>
1	Introduction	161
2	The organisation–customer relationship	161
3	Customer orientation, strategic positioning, customer value and profitability	164
4	Customer profit and customer life-cycle value	177
5	Performance and risk management implications	178
6	Chapter summary	179
7	Chapter questions	180
8	References and other research readings	185
<b>Chapter 8</b>	<b>Supplier value, risk and inventory management</b>	<b>187</b>
1	Introduction	187
2	Managing the supplier–organisation relationship	189
3	Using inventory management techniques to manage suppliers: EOQ, MRP and JIT	191
4	Supplier costs, value and risk	201
5	Chapter summary	206
6	Chapter questions	206
7	References and other research readings	211
<b>Chapter 9</b>	<b>Quality management, costing and risk</b>	<b>213</b>
1	Introduction	213
2	A changing view of quality	214
3	Quality as an operating strategy: quality assurance, TQM and BPR	216
4	The implications of a quality approach for processes, activities and accountants	220
5	Quality costs and reporting	222
6	Quality, performance measurement and risk	227
7	Chapter summary	229
8	Chapter questions	229
9	References and other research readings	234

<b>Chapter 10</b>	<b>The natural environment, its costs and uncertainties</b>	<b>237</b>
1	Introduction	237
2	Environmental/ecological costs, control and the internal operating risks	238
3	Ecological regulation as a source of uncertainty	243
4	Changing natural environment uncertainty and organisational strategic management implications	246
5	Chapter summary	251
6	Chapter questions	251
7	References and other research readings	258
<b>Chapter 11</b>	<b>Balanced performance management, risk and organisational value</b>	<b>261</b>
1	Introduction	261
2	The emergence of non-financial performance measures i	262
3	Benchmarking	265
4	A balanced approach to performance management – the balanced scorecard	267
5	Managing strategy outcomes and risk	275
6	Chapter summary	279
7	Chapter questions	280
8	References and other research readings	287
<b>Chapter 12</b>	<b>Organisational value: a risk-enhanced view of financial value</b>	<b>289</b>
1	Introduction	289
2	Traditional and contemporary organisational performance and shareholder value measures	290
3	A risk-adjusted view of organisational value	301
4	Risk management and application for decision-making	302
5	Chapter summary	303
6	Chapter questions	304
7	References and other research readings	309

## About the authors

The authors of this book are Associate Professor Chris Hunt, Dr Carolyn Fowler and Professor Lyndal Drennan.

Chris Hunt (Bfin.Admin, M.Ec, PhD, FCPA) teaches accounting at the undergraduate and postgraduate levels at James Cook University (JCU), Australia. His research areas are performance and risk management, with particular interest in the water and power generation sectors and ecological sustainable service delivery and New Public Management. He has 15 years' experience working as a senior manager in both public and private sectors, balanced by 19 years academic teaching and research experience.

Carolyn Fowler (B.Com, M.Com, PhD, CA, CMA) teaches in the management accounting, accounting history and accounting information systems areas at both at the undergraduate and postgraduate levels at Victoria University of Wellington (VUW), New Zealand. Her research interests cover accounting education and the accounting profession, nineteenth century accounting history, and contemporary developments in information systems and management accounting. She has more than 10 years of work experience in small business and the telecommunications industry, balanced by 18 years academic teaching and research experience.

Lyndal Drennan (BCom, MBA, PhD, FCPA, FAICD, FAIM) teaches management accounting, strategy, and business planning at James Cook University and at the Australian Institute of Management (Qld and NT). Her research interests are performance management, and accounting graduates' competencies and standards from the viewpoint of employers. Lyndal worked for over 20 years as management accountant in manufacturing industries, CFO, financial controller, and company secretary, and equity lender in a merchant bank, before returning to university to complete a doctorate in performance measurement and management systems. She now combines a consulting business with roles in academia.

# Chapter 1

## Introduction – management accounting and its environments

### 1. Establishing an environmental context

The internal operating environment of an organisation is, or should be, driven by the external relationships the organisation explicitly engages in (such as its customers, suppliers or financial institutions) or is implicitly engaged with (including competitors, government regulation, community and the need for social responsibility). This is because the internal environment is the result of the business activities an organisation undertakes and the quality of the outcomes it desires by engaging in these relationships. Thus, the focus of this book is on understanding and accounting for the explicit and implicit external relationships an organisation engages in. The specific focus will be on how the performance of these external relationships and their associated business risk might be managed and controlled for in the internal operating processes and activities of the organisation.

Relationships that originate from an organisation's external business environment are less controllable than relationships originating from the internal operating environment, if only because of the differing levels of power and control an organisation can exercise over its internal operating environment as opposed to that of its external business environment. Consequently, an organisation's external relationships have the potential to be associated with higher degrees of uncertainty than internal relationships, or to be significant in terms of determining future survival and outcomes. These external relationships require regular monitoring and more-intensive modelling and interactive management, particularly in relation to suppliers, customers and competitors. The identification, performance monitoring and modelling of these relationships should be integrated into organisational internal processes and procedures in such a way that management and owners can identify the strategies they wish to pursue.

Critical to the motivation of this book are the externally driven strategic choices made by management and their integration into an organisation's management control, accounting information and other systems. A *business risk lens* (AS/NZS ISO 31000:2009) will be used to give dimension to that focus. The choice of a risk focus is driven by a need to identify the association between (1) activities and processes identified as contributing to strategy implementation and (2) the measurement of strategy performance and outcomes (Hartmann and Moers, 1999; Bhimani, 2009). As an organisation's aspirations (mission/goals and objectives) provide the lens for the strategic choices an organisation makes, so then these strategic choices should determine the design, function and operation of the organisation's management control system (MCS) and underlying performance and risk management systems (PMS and RMS). It is through this view of the MCS that a cause-and-effect relationship, or association between strategic outcomes, process outputs and activity inputs, can be established. Given that the purpose of any management information system (MIS) is not only to monitor and review strategy outcome performance but also to signal the need for strategic and/or aspirational review, then unless it is driven from the top down (goals, objectives, strategies, processes, then activities), it will potentially be only coincidental that performance and risk management information at the input/output levels will map to outcomes (Chapman, 2005).

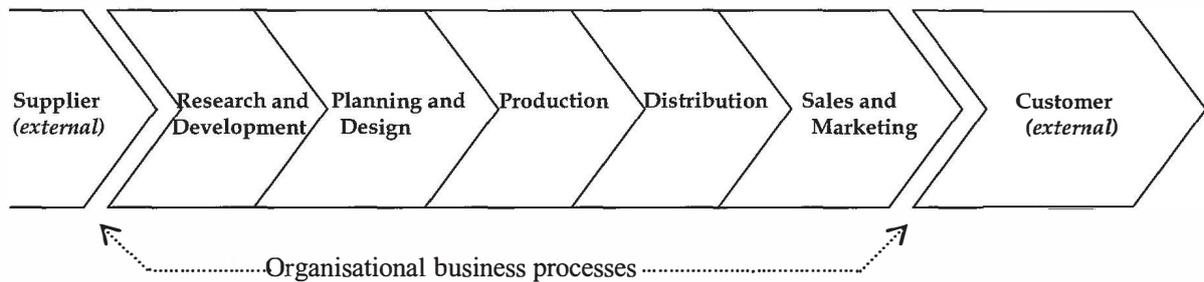
These internal and external environmental relationships involve many stakeholder groups with a diverse range of needs that have a claim, investment, share or involvement in or with the organisation. These stakeholders vary from organisation to organisation, but the following are generally considered stakeholder groups: investors, employees, customers, suppliers, financiers, government, regulators and the community (Alam, 2006).

## 2. Choice of a strategy focus through a business risk lens

Arguably, that which at one time promoted management accounting research but has since hindered its development has been the traditional focus on the production process and a functional/departmental view of organisations (Anthony, 1965; Chapman, 1997; Langfield-Smith, 1997; Otley, 1980). This concentration on production processes and departments, by its nature, means that the focus is on inputs and outputs; in performance measurement and monitoring terms, the focus is on economy and efficiency. While it is important to concentrate on outputs and their associated achievement in terms of economy and efficiency, if these outputs are not contributing to organisational outcomes and survival then they are neither effective nor equitable, particularly in terms of public sector entities and service delivery outcomes. To ensure that effectiveness and equity are considered and are measurable, the activities that give rise to a process need to be viewed in terms of the strategy(s) that they are designed to support. Initiatives such as the value chain, strategic management accounting (SMA – Bromwich 2000), and strategic cost management (SCM – Cooper & Slagmulder, 1998; Shank & Govindarajan, 1988), recognised the need for management accounting to adopt a strategy-based view in developing an organisation's MCS and PMS and to incorporate management/operational strategies such as Just-in-Time (JIT), and Total Quality Management (TQM).

More recently, the concept of a *balanced scorecard* (Kaplan & Norton, 1992) has provided operationally insightful ways in which management accountants can change from a production focus to a strategic focus when providing decision support information for organisational management. With a focus on a primary organisational goal, such as shareholder wealth, the balanced scorecard identifies the need for an organisation's objectives, in attaining that goal, to include the customers, business processes, people, continuous improvement and finances (Kaplan & Norton, 1992; 1996; 2000). These organisational objective considerations cumulatively could contribute to managing the outcome of, for example, increasing shareholder wealth. They identify the organisation's strategic focus and the activities required to implement those strategies on an integrated basis. These strategies and their underlying activities form the base for the development of the organisation's information systems, that is, its MCS, and PMS and RMS. This is consistent with the view adopted in this book that organisational aspirations and strategic choices to implement their achievement drive the design, function and operation of the organisation's MCS and associated MIS. However, to facilitate this, there is a need to be able to map activities, and their inputs, to processes; and their outputs to strategies and their outcomes. Activity based costing (ABC) and an organisation's value chain (Bowhill, 2008; Garrison, Noreen & Brewer, 2006; Shank & Govindarajan, 1992a) provides a starting point for strategy based accounting (SBA).

The *value chain* forms part of the organisation's supply chain. It provides a linear view of the interrelationships between the business processes that are necessary to deliver an organisation's customer-focused strategy that contributes to some organisational outcome (such as increasing shareholder wealth) by meeting the key factors of cost, quality, timeliness and innovation. Figure 1.1 provides a simplistic view of the form that a value chain might take at the business process level.

**Figure 1.1 A simplistic (process level) view of the manufacturing value chain**

Source: adapted from Horngren, Datar and Foster (2006), p. 5

Although simplistic, the value chain focuses on the boundary between the organisation's external business environment and its internal operating environment by way of the break between the supplier and the organisation, and the customer and the organisation. Through the value chain adopting a business-process-based construct, it provides the capacity to deconstruct processes into activities that can be accounted for using ABC and other activity-focused techniques. However, due to the value chain's linear presentation it does not immediately indicate to the user that some processes within the chain can overlap and/or that multiple tasks are performed that contribute to multiple strategies. Further, the focus on adding and/or increasing customer value can detract from the achievement of a primary goal, such as increasing organisational value by contributing to shareholder/owner wealth or society's well-being. Additionally, an external business environment concentration solely on customers and suppliers can restrict consideration of other external sources and types of business risks. For example, sources of business risks emanating from financing relationships, regulation and corporate citizenship include debt gearing ratio limits on loans, taxes, environmental impacts, and community, reputation and equity costs. The degree of risk associated with these relationships differs depending on the significance of the relationship to the organisation in achieving its goal and/or the complexity or volatility of the relationship. The management of and accounting for the limitations of the value chain will be discussed in more detail in Chapter 2 and the subsequent chapters.

The preceding issues aside, the value chain provides a very useful frame of reference for all that follows in this book. In terms of the preceding issues, the value chain highlights the importance for management accounting of adopting a strategic, or outcomes, focus for process and activity identification, if only to provide a means of linking inputs with outputs and outputs with outcomes (Chapman, 2005). Without these linkages, it would be only coincidental that performance indicators and their measures would be meaningful in measuring organisational economy and efficiency, let alone organisational effectiveness. To balance financial and non-financial performance measures (Bhimani & Langfield-Smith, 2007; Bowhill, 2008), as well as provide relevant and timely information for decision-making, it is difficult to measure the quality of outputs and outcomes. Further, in the absence of a measure such as business risk, it is difficult to measure the strength or sustainability of the performance achievements of the organisation at any particular point in time (Liebesman, 2008).

Whether business risk is quantified (e.g., a percentage) or qualified (e.g., Low, Medium, High), without some measure of degree attached to the level and quality of a particular performance

measure, for example profit, it is difficult to assess its sustainable contribution to an organisation's value and, in turn, shareholder wealth. If the level of profit was achieved at an acceptable level of organisational business risk, then there may be higher levels of certainty about profit sustainability in future periods. However, if the profit was achieved at an unacceptably high-level of business risk, then there would be less certainty about future profit sustainability. This is particularly relevant if no strategic adjustment or realignment has been made to reduce or mitigate the sources and types of business risk that have contributed to, or driven, business risk in terms of profit achievement to an unacceptable level. The need to consider business risk directly allows an improved understanding of customer, supplier and organisational value and, for these reasons, it is fundamental in understanding what management accountants do. They develop MCSs, PMSs and RMSs that assist management decisions about control and management of resources and strategies and their associated business risk exposure for the organisation and its owners, whether they are individuals or society (Bhimani, 2009).

For the purposes of this book, the definition of business risk adopted is consistent with that included in the International Risk Management Standard AS/NZS ISO 31000:2009. The standard can be applied to a "wide range of activities including strategies and decisions, operations, processes, functions, projects, products, services and assets" (AS/NZS ISO 31000:2009, (1)). Risk is defined as the *effect of uncertainties on objectives* (AS/NZS ISO 31000:2009, (2.1)). Risks can be positive or negative and can apply at different organisation levels. Generally, risk is referred to as *operating risk* in terms of an organisation's internal environment and *business risk* when referring to an organisation's external environment.

There are 11 principles for managing risk to ensure that risk is managed effectively (clause 3). These are that risk management creates and protects value, is an integral part of all of the organisation's processes, facilitates continual improvement and enhancement of the organisation, explicitly expresses uncertainty and is systematic, structured and timely. Further, it is based on the best available information, is transparent and inclusive, tailored to the organisation's external and internal environment, takes human and cultural factors into account, and is dynamic, iterative and responsive to change. These 11 principles feed into a framework for managing risk that addresses how it should be implemented, monitored and reviewed within the organisation's management systems and the need to improve continuously using data provided from the MIS (clause 4). It ensures that the information regarding risk gained from the risk management process (clause 5) is "adequately reported and used as a basis for decision making and accountability at all relevant organisational levels" (AS/NZS ISO 31000:2009, (4)).

When considering their goals/mission, objectives, strategies, and operational processes and activities, organisations need to consider their internal operating and external business environments and regularly monitor and review the underlying assumptions and associated performance indicators to assess whether or not an environmental change has positive or negative risk implications for the organisation. What constitutes a strategy for the purposes of this book and in a management accounting context is a little more complex, and is examined next.

### 3. Strategies and objectives

The management accounting research literature has adopted and identified a range of strategic positions, types of strategies and strategic missions an organisation might take in competing in its targeted market place (e.g., harvester, prospector/innovator, cost leader, differentiator, etc.)

(Cinquini & Tenucci, 2010; Langfield-Smith, 1997; 2005). Underpinning an organisation's umbrella or overall strategy are normally a number of operating-focused strategies (e.g., capital investment, succession planning, training and development, performance-based rewards systems, transfer pricing, JIT, TQM, etc.) that an organisation might adopt to achieve its market positioning strategy(s).

A potential delineating factor between umbrella strategies and operational strategies are the organisational objectives that different strategies are designed to implement in contributing to goal achievement or aspirations. The preceding umbrella strategies are about identifying market position aspirations, approach and mission – that is, the organisational objectives; whereas operational strategies are about resourcing and implementing organisational objectives. This delineation appears to have been overlooked as research has developed (Kaufman, 1992; Perrow, 1967) within the management accounting academic literature.

### 3.1 Organisational objective choices

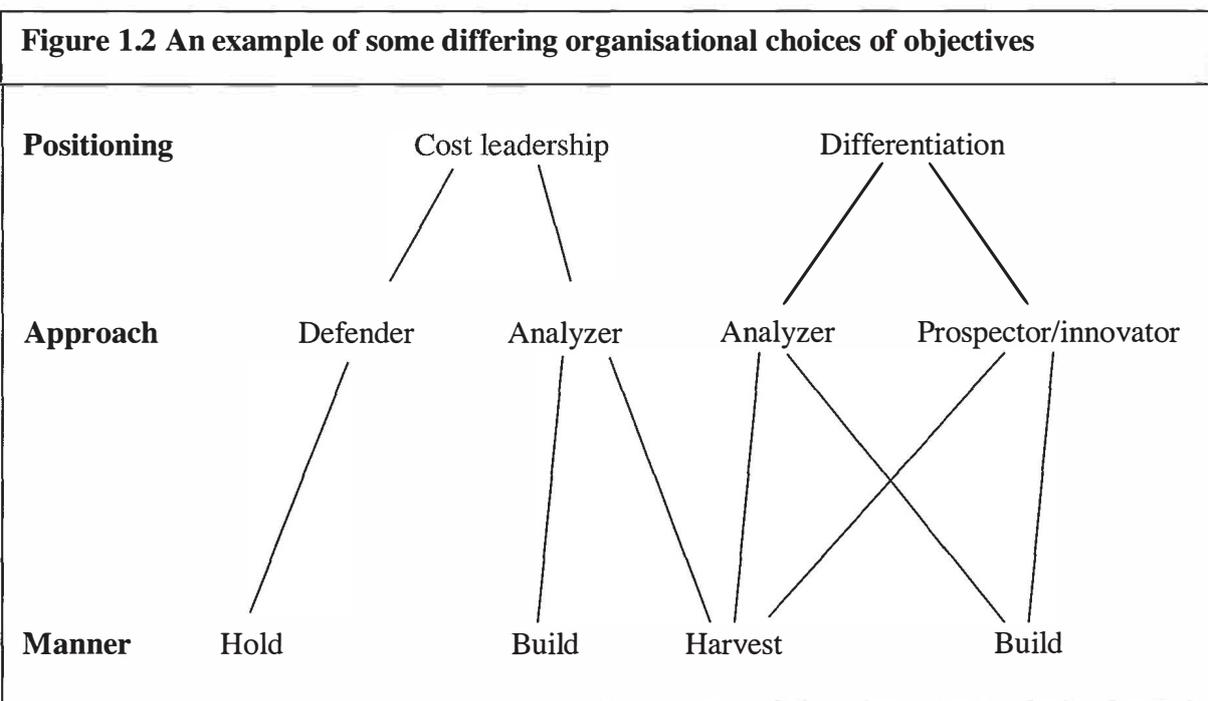
The three components of an organisation's umbrella strategy (Langfield-Smith, 1997): strategic position (Porter, 1980; 1985); strategic approach (Miles & Snow, 1978); and strategic mission or manner (Gupta & Govindarajan, 1984) can be portrayed in terms of the organisation's objectives. Within each of these components, there are a number of sub-components. At the *objective position level*, there are two well-discussed positions, that of cost leadership and differentiation (Porter, 1980; 1985). The cost leadership objective is one where an organisation perceives that its best chance (acceptable business risk) for achieving a sustainable competitive advantage is through being the lowest cost producer in its industry and market sectors. This objective can be sustainable where large capital investments in production technology and research and development are made and the organisation has an established and focused market position like Intel, Samsung or Apple. The size of capital and research and development investment to gain advantages, such as economies of scale and in leading product design evolution, does present a barrier to competition for new entrants (Barney, Wright and Ketchen Jr., 2001). A differentiation objective tends to be market-led, or based in terms of the need for timely quality information about customer product attributes for different customer preference groups. The product attributes determined by customer demands for quality and product dependability may be supported by high-level service backup that is accessible on a timely basis by all organisational customers.

The objective that identifies the *approach* to be adopted by an organisation might take the form of defender, prospector/innovator, or analyzer (Miles & Snow, 1978). Defenders tend to be finance-, product- and process-focused and reliant on a small product range. Further, they tend to place less emphasis on marketing and research and development. Prospectors/innovators maintain their position through identifying new product attributes, new products and new or different markets and market creation. They are strongly customer-, marketing- and research-and-development-focused. Analyzers pick and choose the best approaches from both defender and prospector/innovator objectives. The *manner* in which the organisation chooses to achieve its objectives takes the form of being a build, harvest or hold strategy or mission. By following a build strategy, organisations forgo short-term profits or cash flow to increase their market share and improve their competitive position. In contrast, a harvest strategy focuses on maximising the short-term profits or cash flow while not being concerned with improving their market share. A hold strategy is somewhere in between the two, whereby an organisation maintains a reasonable return on investment whilst protecting its competitive position and market share (Gupta & Govindarajan, 1984; Langfield-Smith, 1997).

An example of the form of the relationship between these objective components is provided in Figure 1.2 (refer to Langfield-Smith (1997) for further discussion of these relationships). The organisational choice of its positioning objective can be determined by a range of external and internal organisational factors. These include the consideration of:

1. what might be perceived to be the market niche in terms of existing competition;
2. the degree of potential product substitution, customer expectations and any current gap in the existing market, or barriers to entry for a new organisation; and
3. strategic options for maintaining an already dominant market position.

By their nature, positioning objectives are heavily influenced by the organisation's existing or potential external business environment (Bui, Hunt & Fowler, 2008; Cinquini & Tenucci, 2010; Langfield-Smith, 1997). However, the origin of these positioning objectives arises from the mission or goal statement that is determined for, and by, the owners (Kaufman, 1992; Perrow, 1967).



Most organisations, particularly medium to large ones, whether they are public or private sector entities, have a declared mission, or goal statement. Small organisations may not have a formally stated mission, but it may be implicit in the minds and actions of the owners. For a private sector organisation, their mission statement might be to *sustainably and in an environmentally responsive manner increase shareholder wealth and organisational value*. For a public sector organisation, it might be to *sustainably and in an environmentally proactive manner provide quality services on demand*. The private sector mission is about increasing shareholder (ownership) wealth through increasing organisational value on a continuing basis. The public sector mission is about continually improving the organisation's contribution to society through improving and increasing service delivery on an ongoing basis. The mission statement takes a long-term view of what the organisation's goal, or purpose, is in life. Typically, an organisation will then look at where it is currently placed and where it sees itself being in, say, five years, in terms of achieving its mission or goals. Given its current and desired resourcing capacity over this term, it will then identify a number of objectives that will contribute to its continuing to achieve its mission (Kaufman, 1992). For example, it could

decide that its mission is best achieved by it adopting the objectives of cost leadership position, analyzer approach and builder manner.

The choice of being a cost leader is about the organisation identifying how it might position itself in terms of competitors and market outcomes that would allow the achievement of its mission. Through adopting an analyzer approach, it is taking a cost leadership role by ensuring that it has the capacity not only to defend its current position, but also to be innovative in terms of products and services by staying ahead of its current competitors and future potential competitors. Being a builder is consistent with increasing shareholder wealth and organisational value, or in service delivery continually meeting demand. How the organisation achieves these objectives is through the strategies it adopts.

Nonetheless, contemporary research into positioning strategies (refer to Chapman (2005) for a summary) or organisational objectives is based on a static view and is not driven by change or risk. Risk is never static and this needs to be incorporated into any choice of objectives or strategies. Due to competitive forces, rapidly changing technology and/or customer preferences, the organisation may need to change objectives. Any change in organisational objectives will result in a need to review, if not revise, its strategies. In doing so, a revision of its MCS, PMS and RMS will be required if the management accountant is to continue to capture decision-useful information for management decision-making as indicated within the 11 principles of AS/NZS ISO 31000:2009.

For the management accountant, the objectives that an organisation chooses to adopt in pursuing its mission assists in identifying the shape of the outcomes that the organisation desires to achieve. As illustrated in Table 1.1 below, the cost leadership positioning objective permits the achievement of organisational value by ensuring that it not only maintains but also increases its customer share through being able to place its products on the market at a lower price, or cost, than its competitors.

<b>Objective</b>	<b>Choice</b>	<b>Outcomes</b>
Positioning	Cost leadership	Increased customers; increased profits; increased return on investment; lower product costs compared with competitors; investment in technology; organisational image; and other measures of external business environment sources of uncertainty.
Approach	Analyzer	Innovative edge over competitors; more-effective technology investment compared with competitor investment levels; research and development outcomes versus research and development investment; and capacity to respond to regulatory or economic change.
Manner	Build	Relative degree of maintenance of existing customer base as compared with competitors after consideration of natural growth; customer growth due to new markets; brand performance; product cost versus training and development; market expansion capital investment returns; and product attributes and prices compared with competitors' substitute products.

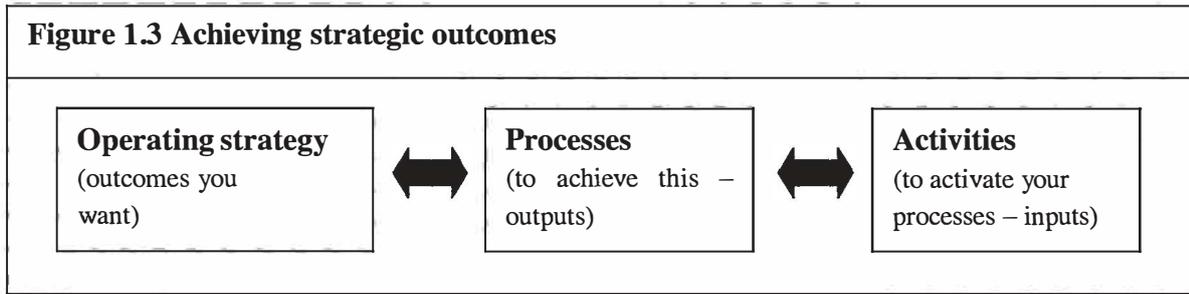
An organisation may choose to limit regular or interactive monitoring of outcomes to a number of key outcome measures while taking only a diagnostic interest in others (Simons, 1990; 1995). While organisations operating in the same industry may be monitoring the same

outcomes, due to a number of factors (including the choice of objectives) different outcomes will be considered more significant than others in any one organisation as a result of those organisational differences. Organisations will use the weighting, or the level of sensitivity/significance, of each of the differing outcomes when setting the target levels of outcome achievement in pursuit of its goals. In doing so, the organisation can make an assessment of acceptable business risk exposure in terms of the cumulative assessment, across all objectives, of past and future outcome achievement expectations. It can also assess the likelihood of achieving the desired increases in shareholder wealth and organisational value, or maintaining its capacity to deliver quality services on demand. While the identification of goals and objectives provides the reasons for the organisation existing, and therefore the outcome aspirations necessary to sustain its existence, consideration as to how the organisation might operate and be structured to achieve its desired outcomes must occur. Typically, this is achieved through identifying the organisational strategies necessary to achieve the organisational objectives. In doing so, the mix of resources necessary to support the processes and their operationalising activities can be identified along with the inputs and outputs necessary to achieve the organisational outcomes.

### **3.2 Operating strategies, organisational and sustaining activities**

An organisational objective can be operationalised by one or more strategies (Cinquini & Tenucci, 2010). Additionally, one strategy can contribute to the achievement of more than one objective and/or outcome. Some operating strategies that a management accountant will be exposed to include: target pricing and costing; whole of product/service life-cycle costing; JIT management; TQM; and environmental cost management, to name but a few. For example, consider a target pricing and costing strategy in a manufacturing organisation. The target price is determined by considerations such as customer product-attribute choices and competitors' substitute products. After considering a reasonable return for the organisation that contributes to such things as profits, dividends and capital investment, product costs are determined. Then a basis is provided to ensure that product design and innovation support the production efficiency initiatives so that the organisation produces the product for no more than the target cost. Alternatively, a target costing approach could be applied to a public sector service organisation. The public, through Parliament, determines how much income will be appropriated from government revenues for use by a public sector organisation in the delivery of its services. Based on the expected demand for its services, the public sector organisation must determine the resources that it has available to provide those services. In sustaining the quality of services, the organisation must continually review customer needs and research improved ways of meeting those needs, while ensuring that staff have the necessary skills and expertise to continue to deliver quality services.

The target pricing and/or costing strategy, in both the above cases, is driven by customers and other external business environment considerations so that the respective organisation can deliver its organisational outcomes. An organisation is not restricted to the choice of only one strategy. It may, for example, supplement a target pricing strategy with both JIT and TQM strategies to manage operating costs by decreasing inventory holding time and handling, outsourcing some components of research and development through stronger supplier relationships, and setting specific product quality targets for different products or services. However, in delivering those outcomes the strategy(s) identify and define the differing processes, and process activities, that the organisation must have in place. Figure 1.3 summarises the strategy (outcome), process (output) and activities (input) relationship required for an organisation to operationalise its objective achievement.



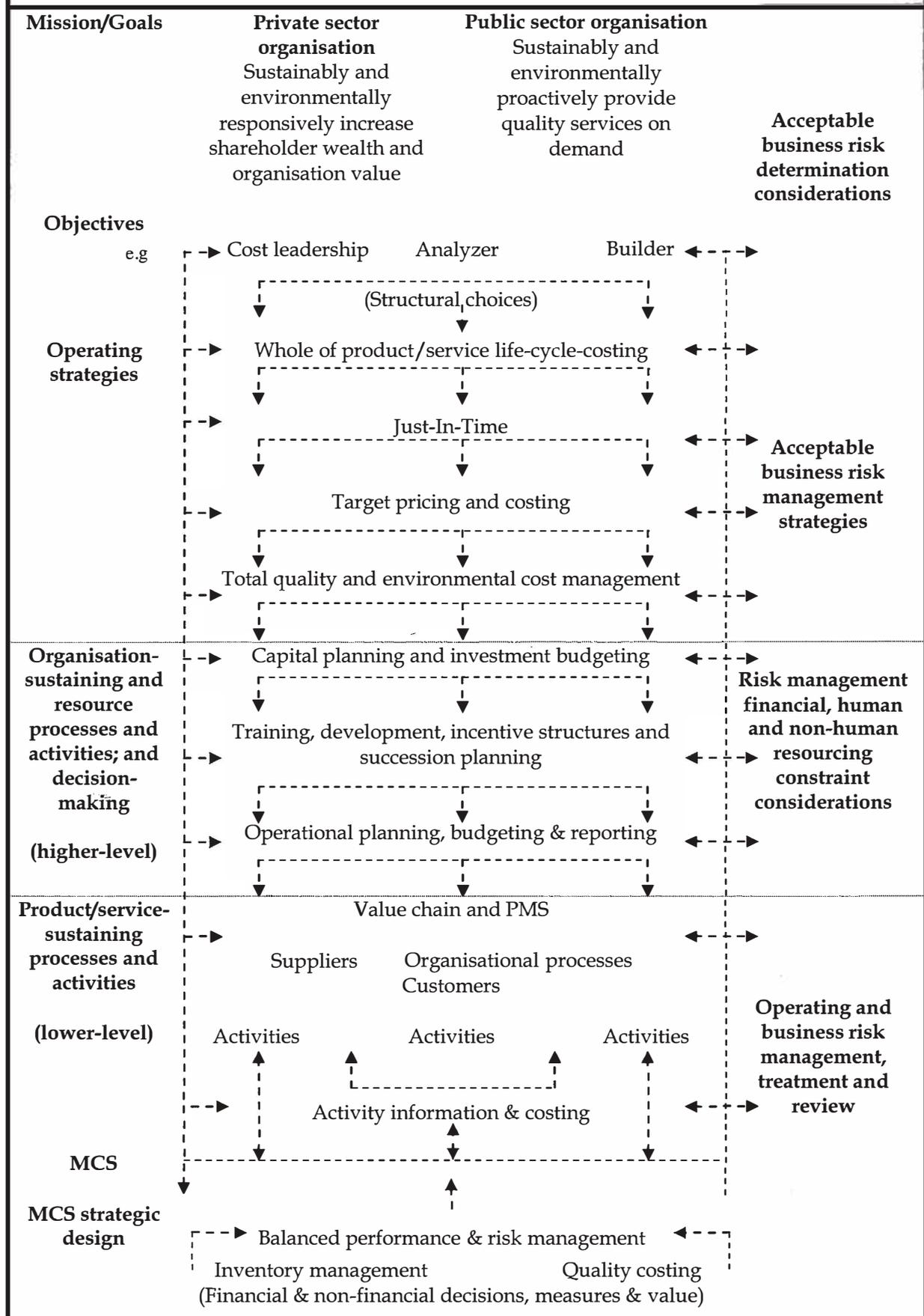
In identifying the relationship depicted in Figure 1.3, the chosen strategies of the firm also determine the organisation's MCS and underlying PMS and RMS. Critical components of these systems are capital planning and investment budgeting, training, development, incentives structure and succession planning, and operational planning, budgeting and reporting. These plans, budgets and reports, and decisions associated with them, are designed to align resources in a manner that is consistent with ensuring that the activity inputs and processes are sufficiently and appropriately resourced to deliver planned outcomes. In doing so, ensuring that a balance between the resourcing of organisation-sustaining and product-sustaining activities is achieved. Figure 1.4 (on the next page) provides an overview of how an organisation's mission/goals, objectives, operating strategies, processes and activities and MCS might interrelate in terms of the preceding example of an organisation adopting the objectives of cost leadership, analyzer and build in achieving its mission.

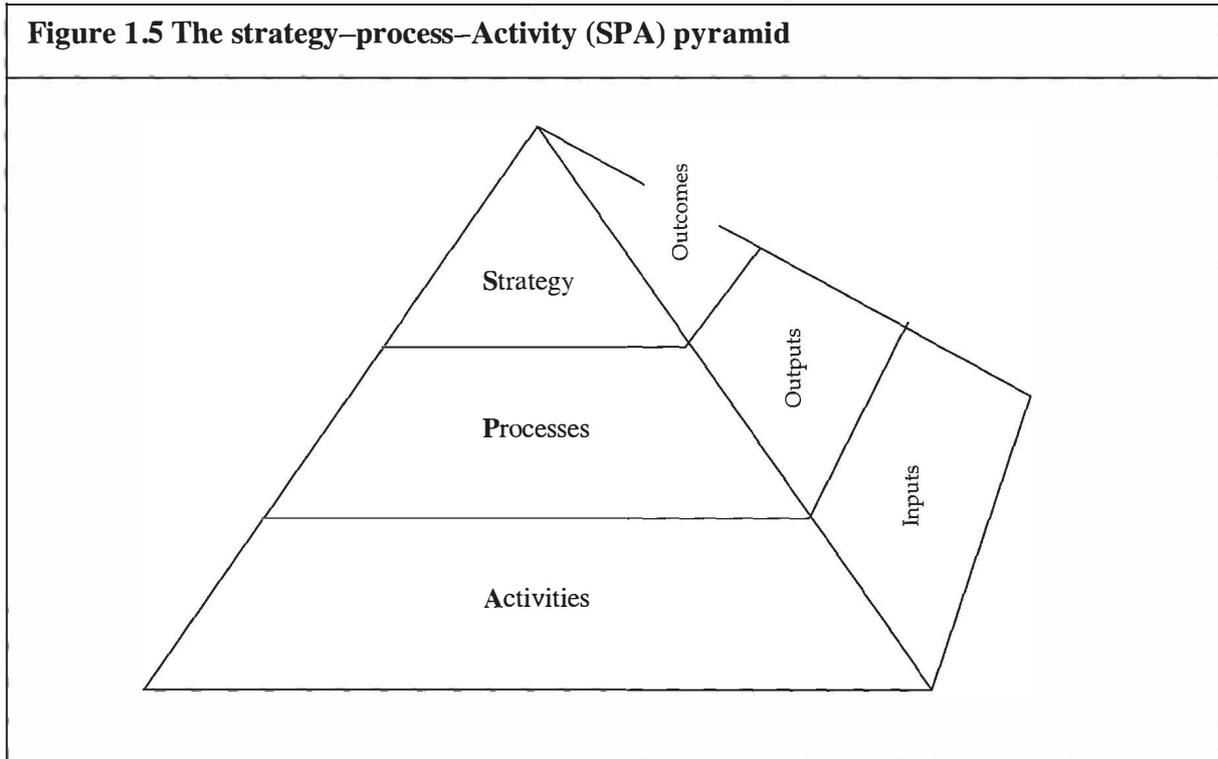
The top-down approach adopted in Figure 1.4 is designed to ensure that activities, processes and strategies align with organisational objectives. This is critical for ensuring that management control is acting in concert with organisational interests to ensure there is a match, or fit, between the actions of the organisation and its business environment (Donaldson, 2001; Langfield-Smith, 1997).

In doing so, the performance and risk management systems allow the provision of decision information that supports informed monitoring and review by management of outcomes (Hunt, Bradshaw & Bui, 2007). This book will take a top-down approach to strategy development and implementation. While specific mission/goal and objective selection choices might be referred to in order to provide discussion context, these topics will not be pursued further in any detail. Simply expressed, the focus of this book can be represented as a strategy–process–activity (SPA) pyramid, as presented in Figure 1.5 (on page 11).

The pyramid form adopted in Figure 1.5 is designed to depict that one activity can be related to, or have an impact on, other activities and result in one or more activities contributing to a process or a number of processes. Similarly, one or more processes can combine to implement one or more strategies. The separation between activities, processes and strategies represents the breakdown between inputs, outputs and outcomes. This in turn represents an attempt to demonstrate the alignment between the performance and risk management hierarchies of efficiency, economy, effectiveness and equity (a public sector consideration). A risk management lens provided by AS/NZS ISO 31000:2009 will be used for balancing the interpretation of financial and non-financial performance management discussions throughout this book. While the choice of goals and objectives will not be considered in much depth throughout this book, the choice of strategies will be. Strategy choice is discussed next.

**Figure 1.4 Outcomes-focused performance and risk management systems development**



**Figure 1.5 The strategy–process–Activity (SPA) pyramid**

#### 4. Strategy choice and decision-making

Organisations need to make decisions that are aligned to their goals, missions and objectives and utilise strategies that consider uncertainty and risk. Major risk factors include inaccurate or incomplete information, the timeliness of that information, and the trade-off between reliable and relevant information. Hence, the decision made needs to be based on strategy rather than the process or activities, and thus is driven by the organisation's operational strategies.

Although the decision-making process is influenced by political, social and cultural considerations, major organisational decisions are normally made based on a rational choice model (Simon, 1977; Van den Hoven, 1996). This is performed by identifying and stating the problem or issue through the gathering of pertinent environmental and organisational information and relating it to organisational strategies and objectives. Then, alternative solutions (suitable for achieving organisational objectives) are determined and information regarding these solutions is collected and considered. One alternative is chosen and implemented, and then re-evaluated to see if it has solved the problem. If the problem is not resolved, then the process reverts to the appropriate previous step.

Other alternative decision models containing a varying number of steps to the decision-making process include models by Kepner & Tregoe (1965) and Hammond, Keeney and Raiffa (1998). The latter model incorporates uncertainty and risk tolerance into the decision-making process and will be discussed in Chapter 4. This type of decision-making process can apply to decisions regarding, for example, what performance measures to use, what capital expenditure project to invest in, or what accounting tools or techniques to implement. Different types of information systems can be used to facilitate the decision-making process, including decision support systems, enterprise information systems, expert systems, intelligent systems and knowledge management systems.

Accounting-determined financially based information has a role to play in this decision-making process. However, it needs to be extended beyond the traditional types (e.g., tangible

quantifiable costs and benefits) to include concepts such as opportunity costs and benefits, intangible costs and benefits, external environmental negative and positive risks, non-financial risks and other qualitative strategic considerations (Bhimani & Langfield-Smith, 2007; Bui, Hunt & Fowler, 2008; Chapman, 2005; Kaplan & Norton, 1996; Shank & Govindarjan, 1988). This is because sometimes the best relevant accounting information answer is not necessarily the best answer for the organisation strategically.

## 5. Strategy-based accounting

The focus of this book is on accounting for external environment and risk and associated decision-making and performance management tools, treatments and techniques. It is about accounting for positioning and operating strategies, as well as the processes and activities (Figures 1.3, 1.4 and 1.5) and the incorporation of risk into these strategic decisions and the management of performance (Figures 1.4, 1.5 and 1.6).

This chapter has introduced the concepts illustrated in Figure 1.6, on the next page. Chapter 2 develops the concepts of strategy-based accounting from the current contemporary strategic management-accounting-, process- and activity-based supply or chain view incorporating value chain analysis, life-cycle reporting and target pricing and costing. It then extends the supply/value chain concept to develop a strategy-based value chain (SBVC) that is constructed around the concepts of supplier, organisational and customer value and associated risk management and strategy-based accounting (SBA) implications. Chapter 3 explains the difference between activity-based costing (ABC) and traditional costing. It then demonstrates and discusses ABC. By using ABC as its foundation, the chapter then extends the analysis of ABC into a discussion on activity-based management (ABM).

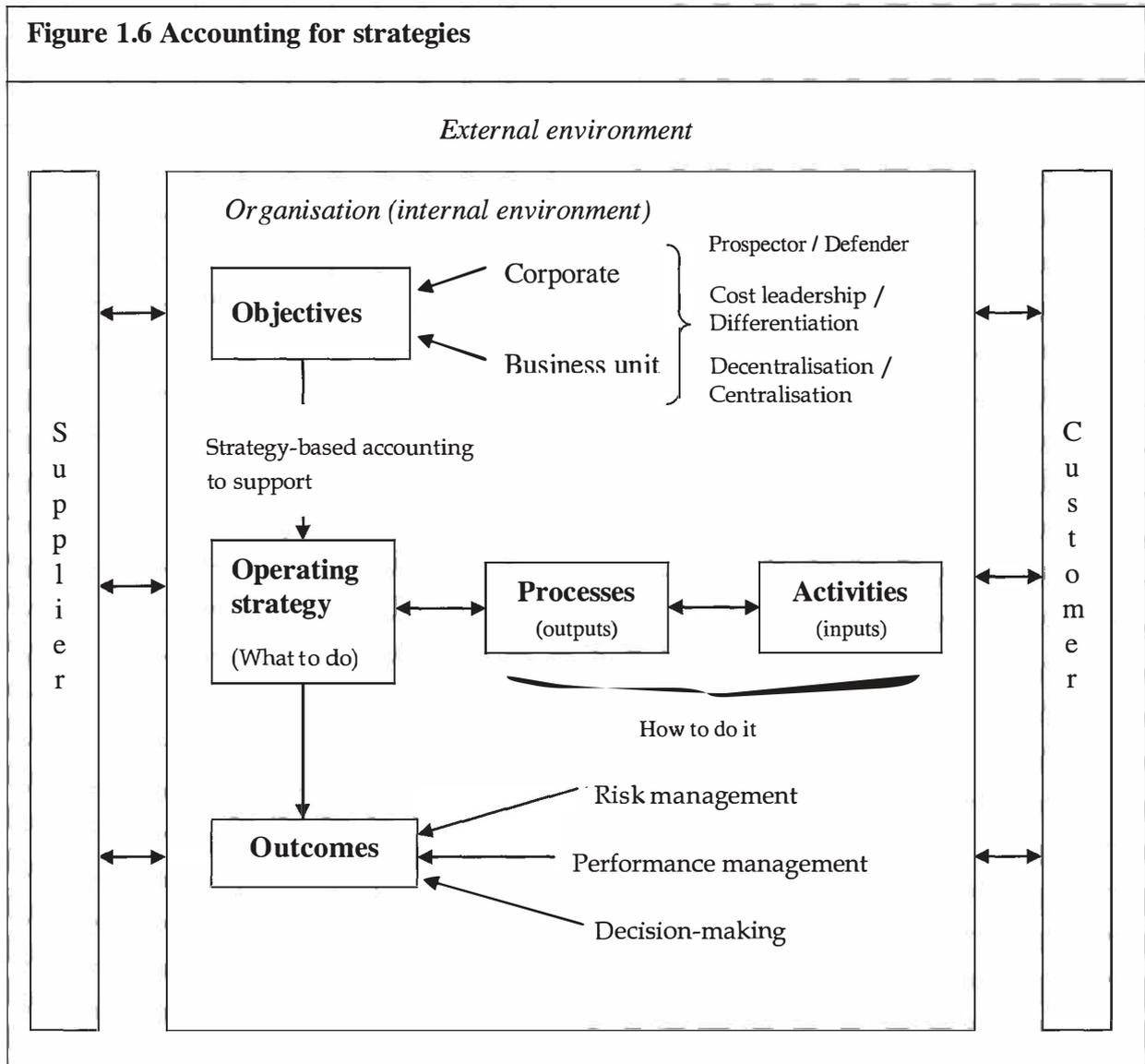
The analysis of an organisation's environment from a strategic viewpoint continues in Chapter 4 with the consideration of strategic choice in a risk environment. Strategic versus short-term or traditional decision-making is discussed and evaluated along with the resulting implications for organisations at the internal and external environmental levels. Decision-making tools and techniques including the incorporation of opportunity and other unquantifiable costs, and capital budgeting, are considered. The analysis is then extended into a risk-enhanced view of organisational decision-making at the SPA pyramid levels using an AS/NZS ISO 31000:2009 risk-focused lens.

A key component in managing risk in any organisation is the management of human resources. Chapter 5 examines human resource management, behavioural consequences and the impact of these on the organisation. It evaluates the role of self-interest, norms, values and culture and incorporates this analysis into a discussion on compensation, incentives, empowerment and innovation. Related to the management of human resources are decisions that need to be made regarding the appropriate organisational structure required to achieve organisational outcomes. Chapter 6 considers the decentralisation versus centralisation choice and the risks associated with it. Transfer pricing is presented as a potential decentralisation management strategy.

Once the human and structural elements of the organisation have been considered, the focus of the book shifts to customers. The focus in Chapter 7 is on the customer end of the SBVC, where customer value and profitability are discussed along with the risk management implications. The need for customer-focused strategies is examined and tools and techniques for monitoring and managing customers and risk exposure are presented, including customer profitability analysis and customer life-cycle value. Chapter 8 examines supplier value, external relationships and the traditional and contemporary tools and techniques for the

management of inventory, with an emphasis on the risk management implications involved in monitoring and managing supplier value.

**Figure 1.6 Accounting for strategies**



Chapter 9 shifts the focus from suppliers and customers to the wider environment and the major externalities within this. Chapter 9 focuses on quality and contrasts the traditional views of quality with its use as an operating strategy and as a way of managing organisational, customer and supplier value and risks. The focus on quality is further extended in Chapter 10, which considers the traditional environmental cost focus and then evaluates the impact of economic environmental interventions such as climate change and emission trading schemes. As a response to these interventions, environmental cost accounting needs to incorporate external materiality and the management of environmental risk and consider implications for the SBVC. Product life-cycles and quality management are presented as tools and techniques for managing these risks.

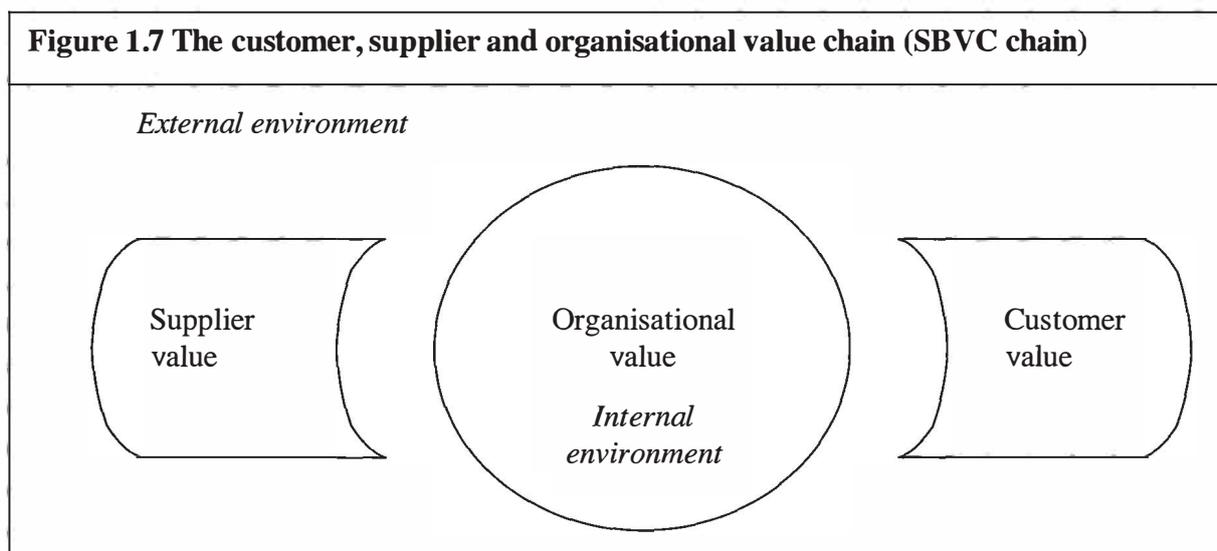
To determine whether an organisation's strategies are working and it is achieving its outcomes and objectives, organisational performance needs to be monitored, measured and managed. Chapter 11 focuses on outcome measurement and strategy-based performance management. It discusses the use of strategic performance measures that incorporate financial and non-financial considerations, with a focus on the balanced scorecard, and the use of these to manage uncertainty and risk at the strategy, process and activity levels. The final chapter,

Chapter 12, continues the strategic-based performance management focus and considers the financial aspects of determining organisational value. It evaluates and applies traditional financial methods for determining organisational value, such as earnings per share, residual income, return on investment and EVA<sup>®</sup>, and their strategic implications. As a result of this evaluation, a risk-adjusted view of organisational value is presented.

## 6. Customer, supplier and organisational value and its strategic management

Organisational activities and processes exist to allow the achievement of an organisation's strategic objectives. The focus on accounting for strategies as well as for processes and activities means that we should consider how each of these contributes to the value of the organisation, as well as to supplier and customer value. *Organisational value* relates to the value created within the organisation's internal environment and includes such things as providing services to clients, supporting internal customers, and assembling products. *Supplier value* considers the relationships the organisation has externally with its suppliers and the management of these, including the appropriate inventory management practices to support organisational objectives. *Customer value* focuses on the customers external to the organisation and how they are to be monitored and managed to reduce risk exposure. The relationship between these three types of value is illustrated in Figure 1.7 and is referred to as the strategy-based value chain (SBVC).

By considering how this value is created, organisations can enhance or improve their value-adding strategies, and related processes and activities, and explore ways of reducing or eliminating non-value-adding strategies and associated activities and processes. Areas that need to be evaluated include cost, timeliness, innovation and quality (Chapman 2005; Turney, 2000). The operating strategies (as discussed above) can contribute to achieving value within the SBVC chain.



There are risk implications that need to be considered in assessing and determining organisational value. These include those from the internal environment such as ownership, resourcing, technology, labour disputes and shortages, obsolete facilities, a lack of managerial depth and talent and a weak market image, as well as those from the external environment including competitor behaviour, economic pressures on interest and exchange rates, and costly

regulatory requirements. Those associated with supplier and customer value are changes in technology, information sufficiency or deficiency, price and bargaining power changes, substitutable products or services, and economic conditions. Any accounting tools, treatments or techniques utilised in the value-determining process should incorporate these risk implications.

Further, organisational value needs to be managed strategically, as organisational value is not determined by financial numbers and considerations alone. The need to consider a balance of both financial and non-financial information has been recognised (Bhimani & Langfield-Smith, 2007; Bromwich, 2000; Cooper & Slagmulder, 1998; Shank & Govindarajan, 1988). Additionally, more recently there has been a recognised need to support performance management information with risk management information (AS/NZS ISO 31000: 2009; Bishop, 2008; Bui, Hunt & Fowler, 2008; Liebesman, 2008). In doing so, the determination of the sources and types of performance and risk management information needs to be in terms of strategic outcomes. The outputs and inputs that contribute to assessing achievement of the strategic outcomes should be derived in a top-down manner, working through the processes and activities that have been identified as necessary to operationalise the organisation's strategies. By their nature, strategic outcomes occur in the external business environment of the organisation and their degree of achievement is measured in terms of the organisation's performance in that environment and at that level. However, within the organisation there is also a need to measure the performance of the budgeting, planning, processes and activities that contribute to the strategy implementation and performance, and their degree of alignment with the strategy needs. How well the organisation performs within the outcome, output and input levels and across levels of strategy implementation goes not only to determining the organisation's current value, but also to estimating its future value and the sustainability of that value. For the management accountant to capture and report this information in a decision-useful manner requires a balancing of financial, non-financial and risk assessment information at all three performance levels. In doing so, it also requires consideration of the quality and value of organisational external relationships, such as those with suppliers and customers, to be assessed for their impact on organisational value. How this strategic management of organisational value might be achieved is developed within this book.

## 7. Chapter summary

Organisations are operating in an ever-changing and increasingly more-complex external business environment where global influences are more increasingly at play (Bishop, 2008). To survive and grow in this external business environment, an organisation's information needs must be shaped by its goals and objectives and driven by its strategy choices in operationalising achievement of the organisation's aspirations (Kaufman, 1992). The strategy choices of the organisation determine the processes and activities of that organisation and the outcomes they are required to achieve. From a management accountant's perspective, the strategy choices define the design, function and operation of the organisation's MCS (Chapman, 2005). In doing so, they define the PMS and RMS that can no longer rely only on accounting-based financial information, but also need to include non-financial performance and risk measures (AS/NZS ISO 31000: 2009; Bhimani & Langfield-Smith, 2007; Bishop, 2008; Bui, Hunt & Fowler, 2008; Liebesman, 2008). These performance and risk measures not only improve the quality and types of decision information available to managers in assessing organisational outcome and strategy performance, but also provide the organisation with the flexibility to adapt to the change and complexity of their business environment through signalling the need for strategic and/or organisational objective review.

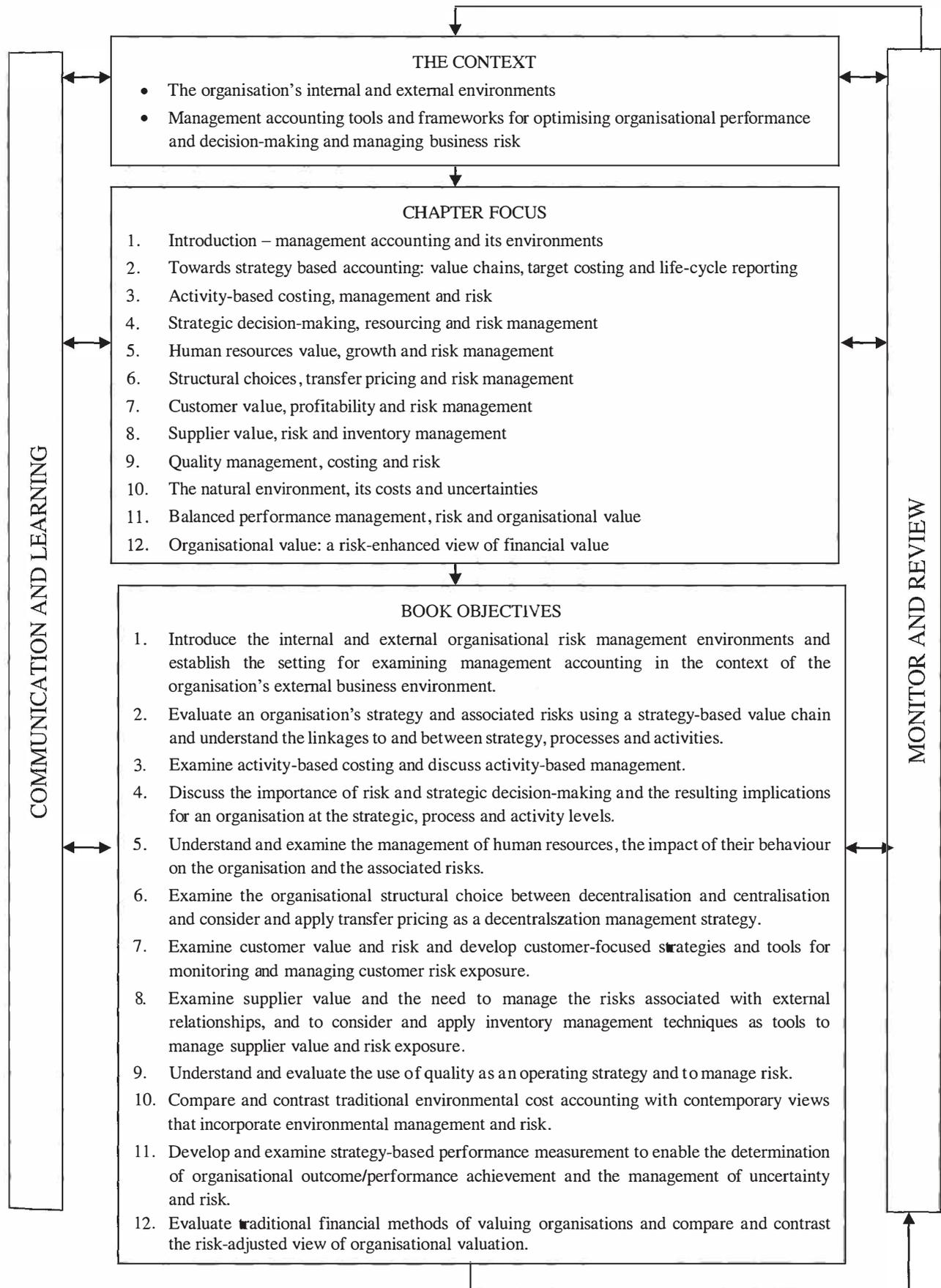
This book adopts a strategy-focused approach to examining how the management accountant, with the tools, techniques and frameworks available, might identify the controls and information needs of the organisation to facilitate its journey through the ever-changing and increasingly more-complex external business environment. The tools, techniques and frameworks available to the management accountant that are examined in this book are drawn from the existing contemporary management accounting tool-kit. This tool-kit includes some traditional tools along with those added through SMA and SCM, as well as those developed a little further through a SBVC lens and the discussion on how SBA might be achieved. Figure 1.8 (on the next page) provides an overview of the structure of this book.

## 8. Chapter questions

### Review and Discussion

- 1.1 Explain why being aware of and managing its external relationships are important to an organisation.
- 1.2 Briefly contrast the functional (production) view of an organisation's processes with a strategy-based view.
- 1.3 Outline what a value chain is.
- 1.4 Discuss why it is important that an organisation should measure its business risk.
- 1.5 Outline what is meant by an organisational objective, and describe its three components.
- 1.6 Using Table 1.1 (page 7) as an example, provide outcomes for an organisation that has chosen a differentiation position, prospector/innovator approach and build manner to achieve its objectives.
- 1.7 Explain why it is possible for one strategy to contribute to more than one objective or outcome, and provide one example.
- 1.8 Outline why it is important that an organisation's activities, processes and strategies align with its objectives.
- 1.9 Explain the role accounting information plays in the decision-making process.
- 1.10 Define what is meant by the following terms:
  - (a) Supplier value
  - (b) Organisational value
  - (c) Customer value
- 1.11 Discuss why it is important to consider how customer value, supplier value and organisational value are created and to incorporate risk implications when assessing and determining value.

Figure 1.8 Book overview



## 9. References and other research readings

- AS/NZS ISO 31000:2009, *Risk Management – Principles and Guidelines*. Jointly published by Standards Australia, Sydney, and Standards New Zealand, Wellington.
- Anthony, R.N. (1965) *Management Control Function*, Harvard Business School Press, Boston.
- Alam, M. (2006) Stakeholder Theory. In Hoque, Z. (ed.), *Methodological Issues in Accounting Research: Theories and Methods*. Spiramus Press, London.
- Barney, J., M. Wright, & D. J. Ketchen Jr. (2001) The resource-based view of the firm: ten years after 1991. *Journal of Management*, 27 (6), 625–641.
- Bhimani, A (2009) Risk management, corporate governance and management accounting: Emerging interdependencies. *Management Accounting Research*, 2–5.
- Bhimani, A. & Langfield-Smith, K. (2007) Structure, formality and the importance of financial and non-financial information in strategy development and implementation. *Management Accounting Research*, 18(1), 3–31.
- Bishop, J. (2008) The global CFO – owning ‘the truth’. *Chartered Accountants Journal*, August.
- Bowhill, B. (2008) *Business Planning and Control: Integrating Accounting, Strategy and People*. John Wiley & Sons Ltd., England.
- Bromwich, M. (1990) The Case for Strategic Management Accounting: The Role of Accounting Information for Strategy in Competitive Markets. *Accounting, Organizations and Society*, 13(1/2), 27–46.
- Bromwich, M. (2000) Thoughts on management accounting and strategy. *Pacific Accounting Review*, 11(2), 41–48.
- Bui, B., Hunt, C. & Fowler, C. (2008) A risk focused performance management system framework for planning change in organisations subject to significant environmental pressures and uncertainty. Centre for Accounting, Governance & Taxation Research, Working Paper Series, No. 61, Victoria University of Wellington.
- Chapman, C. (1997) Reflections on a contingent view of accounting. *Accounting, Organizations and Society*, 22(2), 189–205.
- Chapman, C., ed. (2005) *Controlling Strategy: Management, Accounting and Performance Measurement*, Oxford University Press.
- Cinquini, L. & Tenucci, A. (2010) Strategic management accounting and business strategy: a loose coupling? *Journal of Accounting and Organizational Change*, 6(2), 228–259.
- Cooper, R. & Slagmulder, R. (1998) The scope of strategic cost management. *Management Accounting*, Feb, 16–18.
- Donaldson, L. (2001) *The Contingency Theory of Organizations*. Sage Publications.
- Garrison, R.H., Noreen, E.W. & Brewer, P. (2006) *Managerial Accounting*, 11th edn, McGraw-Hill.
- Gupta, A.K. & Govindarajan, V. (1984) Business unit strategy, managerial characteristics, and business unit effectiveness at strategy implementation. *Academy of Management Journal*, 27 (1), 25–41.
- Hammond, J.S., Keeney, R.L. & Raiffa, H. (1998) *Smart choices: a practical guide to making better decisions*. Harvard Business School Press, Boston, Massachusetts.
- Hartmann, F. & Moers, F. (1999) Testing contingency hypotheses in budgetary research: an evaluation of the use of moderated regression analysis. *Accounting, Organizations and Society*, 24, 291–315.
- Horngren, C.T., Datar, S.M. & Foster, G. (2006) *Cost Accounting: A Managerial Emphasis*, 12th edn, Pearson – Prentice Hall, Upper Saddle River, New Jersey.
- Hunt, C., Bradshaw, J. & Bui, B. (2007) A business risk contingent MCS design and review framework: a contingency-based framework or a contingency theory based framework? 1st European Risk Conference, Munster, Germany, 6–7 September.
- Ittner, C. Larker, D. & Randall, T (2003) Performance implications of strategic performance measurement in financial services firms. *Accounting, Organizations and Society*, 28, 715–741.
- Kaplan, R. & Norton, D. (1992) The balanced scorecard – measures that drive performance. *Harvard Business Review*, (Jan–Feb), 71–79.

- Kaplan, R. & Norton, D. (1996) *The Balanced Scorecard: Translating Strategy into Action*. Harvard Business School Press, Boston.
- Kaplan, R. & Norton, D. (2000) Having trouble with your strategy? Then map it. *Harvard Business Review*, (Sep–Oct), 167–177.
- Kaufman, R. (1992) *Strategic Planning Plus: An Organizational Guide*. Sage Publications.
- Kepner C. & Tregoe B. (1965) *The Rational Manager*. McGraw-Hill, New York.
- Langfield-Smith, K. (1997) Management control systems and strategy: a critical review. *Accounting, Organizations and Society*, 22, 207–232.
- Langfield-Smith, K. (2005) What do we know about management control systems and strategy? In Chapman, C. (ed), *Controlling Strategy: Management, Accounting and Performance Measurement*. Oxford University Press, 62–85.
- Liebman, S. (2008) How to manage risk in a global economy. *Quarterly Progress*, 41(3), 58–60.
- Miles, R. & Snow, C. (1978) *Organizational Strategy, Structure, and Process*. McGraw-Hill, New York.
- Otley, D. (1980) The contingency theory of management accounting: achievement and prognosis. *Accounting, Organizations and Society*, 5, 413–428.
- Perrow, C. (1967) A framework for the comparative analysis of organizations. *American Sociological Review*, 32(2), April, 194–208.
- Porter, M. (1980) *Competitive Strategy*. Free Press, New York.
- Porter, M. (1985) *Competitive Advantage*. Free Press, New York.
- Shank, J. & Govindarajan, V. (1988) Making strategy explicit in cost analysis: a case study. *Sloan Management Review*, 29(3), 19–29.
- Shank, J. & Govindarajan, V. (1992a) Strategic cost management and the value chain. *Journal of Cost Management*, 6(3), 5–21.
- Shank, J. & Govindarajan, V. (1992b) Strategic cost management: the value chain perspective. *Journal of Management Accounting Research*, 4, 179–197.
- Simon, H. (1977) *The New Science of Management Decision*. Prentice-Hall, Englewood Cliffs, New Jersey.
- Simons, R. (1987) Accounting control systems and business strategy: an empirical analysis. *Accounting, Organizations and Society*, 12, 357–374.
- Simons, R. (1990) The role of management control systems in creating competitive advantage: new perspectives. *Accounting, Organizations and Society*, 15(1/2), 127–143.
- Simons, R. (1995) *Levers of control: How managers use innovative control systems to drive strategic renewal*. Harvard Business School Press, Boston.
- Turney, P.B. (2000) The State of the 21st Century. *Journal of Cost Management*, 14(5), 45–48.
- Van den Hoven, J. (1996) Executive support systems and decision making. *Journal of Systems Management*, 47(2), 48–55.