Content and Process Approaches to Studying Strategy and Management Control Systems

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This chapter is concerned with developing our understanding of the role of management control systems (MCS) in formulating and implementing strategy. Strategy has become a dominant influence in the study of organizations. Researchers in areas such as economics (Milgrom and Roberts 1992; Seth and Thomas 1994), human resource management (Miller 1991; Kochan and Osterman 1994), information technology (IT) (Grover et al. 1997), and organizational behaviour (Knights and Morgan 1991; Rowe et al. 1994; Rouleau and Seguin 1995) all seek to understand the ways in which their disciplines assist in understanding how managers use strategy to achieve desired outcomes. Management accounting has been informed by these literatures to such an extent that strategic management accounting is seen by many commentators as the key to understanding the effective design and implementation of MCS (Simmonds 1981; Bromwich 1990; Ward 1992).

Costing has developed a strategic focus whereby activity-based cost management (ABCM) has moved from refining the attribution of fixed costs to cost objects to systems that link costs and value drivers to alternate strategies, thereby enabling cost–benefit analysis and an understanding of process requirements to effect strategies (Shank and Govindarajan 1995; Kaplan and Cooper 1998). Performance measurement has evolved from enhancing the usefulness of performance measures by including both financial and non-financial measures to more complex systems based on a balanced suite of measures that provides strategic performance management, including causal maps that show the operational implications for different strategies (McNair et al. 1990; Kaplan and Norton 1992, 1996, 2001). More recently, attention has been focused on how MCS can be used interactively to assist in developing responsiveness throughout the organization to the strategic uncertainties facing the organization (Simons 1995, 2000). These advances are reflected in the emphasis given in most contemporary management accounting textbooks to a strategic orientation to management control.

This chapter draws on the distinction between content and process approaches to help develop understanding of existing strategy-based MCS research and provide a unifying perspective for thinking about a future research agenda. The potential contribution is to clarify the different purposes of content and process approaches, thereby opening debate to reflect on past findings in management control research. Also, a variety of issues concerning both content and process are presented as key areas for future research. First, the difference between content and process approaches is discussed. Second, the ways in which management control has been related to content approaches is examined and the potential for future research in this area explored. Third, process approaches are examined, again with an eye to the extant literature and future directions. Finally, the issue of strategic change is discussed to show how both content and process approaches can help consideration of this research agenda.

Content and process approaches: an overview

A precise definition of strategy is illusive. At one extreme, strategy is defined as the careful articulation of objectives and plans for achieving these objectives (Steiner 1969; Andrews 1980; Ansoff 1987). This suggests a highly rational, systematic approach involving formalized procedures that integrate decision-making throughout the organization to achieve desired outcomes. The strategy function involves articulating 'intended strategies' and formulating deliberate policies to achieve these strategies (Mintzberg 1994: 24). This process results in the formulation of a 'strategic position' (Porter 1980, 1985). On the other hand, strategy can be identified as a pattern of behaviour that evolves over time, based on a perspective or understanding of a way to do things (Jelinek 1979). This definition recognizes that strategy is a process where ideas may emerge in 'unintended' ways involving incremental processes (Quinn 1980; Mintzberg 1994: 25).

The distinction between formal rational approaches and more informal incremental approaches is a useful first step to describe the difference between content and process approaches (Fahey and Christensen 1986; Leong et al. 1990). Strategic content approaches tend to be concerned with the product of the strategy process. They aim to identify what is, or what should be, the strategy to lead to optimal organizational performance. This involves describing the effective competitive positioning of the organization and access to resources within the organization's environment. There is an implicit assumption that individuals behave

rationally and particular strategies can be identified as appropriate to specific situations. Strategy is seen to follow a logical, linear process of strategy formulation, analysis, and implementation. Strategy content research tends to provide snapshots of ideal strategies, or optimal combinations of strategies for organizations facing different settings. Strategic change is typically categorized as being either radical or incremental and the aim is to identify ideal guidelines to assist in managing these different types of change (Kanter et al. 1992; Phillips 1992; Kotter 1996).

Process approaches are also concerned with the content of strategies. However, the interest is in how processes influence the content of strategies, and how does the content influence process (Van de Ven 1995). What are the dynamic relationships between strategic position, resources and outcomes? How is, and how should, strategy be formulated? Who is involved in the strategy process and how do individual differences have effects? What causes strategy to be changed and what is involved in this process? Given identification of a desired strategy, what processes occur to affect the strategy? Process approaches focus on the incremental strategic processes that involve a messy interlinking between strategy formulation and implementation, with unintended ideas emerging during implementation. Similarly, process approaches are alert to the possibility that inherent resistance derived from organizational and behavioural impediments may obstruct strategic change.

Finally, both content and process approaches may be applied to understanding strategy at many levels: corporate, business unit, functional, and network. While strategies have effects across levels within the organization, the nature of the issues differs. At the corporate level, strategy involves questions of what is the nature of the business, such as the major industries within which the organization operates. At the business-unit level, strategy involves more precise issues of products and technologies, while at the functional level strategy is concerned with functions such as manufacturing and marketing. Network strategies recognize that many strategies may involve cooperative rather than competitive relationships with other firms and involve strategic alliances and joint ventures.

Content approaches

Content approaches to strategy aim to identify practices that are associated with enhanced performance. Approaches to formulating and

implementing strategy may be considered as appropriate at a point in time, or the focus may be on identifying the ideal way to manage change over time. In both cases, content approaches seek to identify fundamental principles for developing strategy or guiding strategic change. It is these principles that form the basis for much of the strategic planning literature. In management control, authors draw on the structured 'planning perspective' and separate the work of doing strategy into distinct steps such as setting objectives; formulating corporate, business, and functional strategic priorities; budgeting; monitoring; control; and determining incentives. These processes are often proposed together with contingency plans or scenario planning to allow for changing circumstances. Such approaches are justified as they provide direction, avoid drift, and enhance commitment; they assist optimal allocation of resources; they aid logical task differentiation, enhance coordination between parts of the organization, and provide an orientation to long-term thinking. Management accountants, who favour a rational calculative approach to management, often use this approach.

Content strategists favouring a formal approach to strategy recognize that managers must formulate strategic priorities that will provide competitive advantage. This means developing strategies that enable the organization to adapt to its contextual setting. Such adaptation involves an outside–in perspective that examines the external environment to identify potential threats and opportunities, or an inside–out perspective that concerns the development of internal resources that provides strengths and identifying weaknesses (de Wit and Meyer 1999). Both these approaches have important implications for management control.

Outside–in perspective

Outside–in perspectives provide insights into the nature of the external environment, its threats and opportunities. In its simplest form, a starting point for formal strategic analysis is to consider desired future outcomes and assess how effective current strategies will be in achieving these outcomes. Any shortfall is examined by way of 'gap analysis' that encourages managers to consider both outside–in and inside–out approaches to help understand how to close the gap (Ansoff 1987). A variety of outside–in approaches may be identified. These include an analysis of the nature of markets and their structures using, for example,

Porter's five forces model and product life cycles; and more recently the implications of globalization, networks, and e-commerce.

Porter (1980, 1985) argues that two factors determine the choice of competitive strategy: the potential of an industry for long-term profitability and determinants of relative profitability within the industry. Firms respond to industrial conditions and also shape the conditions to their favour. In any industry, competition is governed by five forces of competition: entry of new competitors, threats of substitutes, bargaining power of buyers and suppliers, and competition between existing firms. The five forces determine industry profitability as they affect prices, costs, and required returns that reflect underlying industry structure as expressed in economic and technical characteristics. From a strategy formulation view these five forces present an outside–in picture of the business environment and direct the manager's attention to developing strategy to compete effectively within the industry. Porter suggests that to cope with the five forces, firms must develop sustainable competitive strategy by effective strategic positioning within the industry. This is achieved by 'product differentiation' or 'cost leadership' either across a broad range of industry segments or 'focused' within a narrow segment.

Porter (1980, 1985) has been important in directing management control research into strategy as it has provided a solid theoretical basis for linking different types of MCS to the generic strategies of product differentiation and cost leadership. From a content perspective, researchers have sought to show what types of MCS best suit these generic strategies. For example, Govindarajan (1988) showed that product differentiation (cost leadership) was associated with a de-emphasis (emphasis) on budgetary goals for performance evaluation. Govindarajan and Fisher (1990) showed that product differentiation with a high (low) sharing of resources and a reliance on behaviour (output) controls was associated with enhanced effectiveness. Van der Stede (2000) identified that product differentiation was associated with less rigid controls that were, in turn, associated with increased budgetary slack.

Other generic typologies of strategy responses have been developed by organizational theorists to categorize managers' reactions to their external environment. As with product differentiation and cost leadership, the adoption of these strategic responses will position the organization within its environment and as such provides insight into the operational setting. Miles and Snow (1978) focused on the rate of change in products and markets, dividing firms into defenders, prospectors, analysers, and reactors. Shortell and Zajac (1990) provided an examin-

ation of Miles and Snow's typology, validating it as an important way of conceiving strategy. Miller and Friesen (1982) identified extent of innovation as a style of strategic response. Managers were either conservative or entrepreneurial. Strategic mission was described in terms of developing market share and/or profitability by Gupta and Govindarajan (1984) as being either build (market share), hold (both market share and profitability), or harvest (profitability).

MCS research has used these dimensions to show the effectiveness of different aspects of MCS. Using Miles and Snow's typology, Abernethy and Brownell (1999) showed that hospitals undergoing strategic change, seen as a more prospector-type strategy, used budgets interactively, focusing on dialogue, communication, and learning. Using Miller and Friesen's (1982) conservative-entrepreneurial taxonomy, Chenhall and Morris (1995) showed that conservative managers of successful organizations used tight control systems, while successful entrepreneurial managers used a combination of tight controls and organic decision processes. Drawing on their concept of strategic mission, Govindarajan and Gupta (1985) found build, compared with harvest strategies and a reliance on long-term and subjective evaluation for managers' bonuses, was associated with enhanced effectiveness, while effectiveness and strategy were not associated with short-term criteria for evaluation. Guilding (1999) found that prospector and build strategies differed from harvest companies in having a stronger orientation to competitor-focused accounting for planning. Competitor-focused accounting involved competitor cost assessment, competitor position monitoring, and appraisal based on published financial statement, strategic costing, and strategic pricing.

Recently, strategy researchers have sought to examine more specific elements of strategic responses. These ideas are focused on the business-unit level and consider issues such as priorities of quality, reliability, flexibility, service, and after-sales service (Miller et al. 1992; Kotha and Vadlamani 1995, Kotha et al. 1995; Campbell-Hunt 2000). Often, these priorities can be seen as elaborations of more generic strategies. Recent management accounting research has focused on these elements of strategy. For example, Bouwens and Abernethy (2000) found that customization (a form of product differentiation) was associated with the level of importance to operational decision-making of more integrated, aggregated, and timely information. Chenhall and Langfield-Smith (1998) drew on the strategic priorities given by Miller et al. (1992) and found that firms clustered around combinations that described product differentiation and low cost price, although elements of both

differentiation and low cost were found in all strategic profiles. Different types of management practices and MCS practices were associated with these strategic profiles.

In the main, MCS research has applied fairly simple definitions of the generic constructs of strategy with correspondingly simple measures of these constructs. For example, Govindarajan (1988) assessed the importance of product differentiation and cost leadership by presenting survey respondents with short descriptions of product differentiation and cost leadership strategies and asked them to indicate the percentage of their organizations sales that could be described by each category. Other approaches have asked managers to select one category that best describes their organization's strategy, based on Miles and Snow's (1978) typology of prospectors–analysers–defenders (Abernethy and Brownell 1999). There has been considerable debate on the meaning and validity of these constructs. Several studies have refined the properties of product differentiation and cost leadership (Miller and Dess 1993; Kotha and Vadlamani 1995, Kotha et al. 1995), while other researchers have identified strategic priorities as a key to understanding strategy (Miller et al. 1992). Researchers in MCS should be aware of these assessments of generic strategic typologies and of the alternatives that have elaborated upon the generic forms. As indicated above, recent MCS research has focused on refinements of strategy (Chenhall and Langfield-Smith 1998; Bouwens and Abernethy 2000).

At a functional level, researchers have identified a broad range of strategic priorities associated with ensuring that production processes can deliver on strategies of quality, timeliness, reliability, and service. Total quality management (TQM), continuous improvement, and process reengineering have been proposed as important ways of developing strategically focused operations. MCS have been proposed to provide information to assist in these practices. Particularly, ABCM, target costing, and value chain analysis attempt to identify cost and value drivers to encourage effective strategy development. Also, there is considerable MCS research that has examined the relationships between MCS and strategy-driven manufacturing practices. For example, research has related MCS to TQM (Ittner and Larcker 1995, 1997; Chenhall 1997; Sim and Killough 1998; Lillis 2002), just in time (JIT) (Banker et al. 1993; Young and Selto 1993; Kalagnanam and Lindsay 1999; Mia 2000; Fullerton and McWatters 2002), customer-focused manufacturing strategies (Perera et al. 1997), product-focused firms (Davila 2000), and flexible manufacturing (Abernethy and Lillis 1995). Chenhall and Langfield-Smith (1998) linked performance with combinations of various traditional and

contemporary controls and a range of strategies and manufacturing practices.

In recent years, outside–in approaches to research into strategy and management control have recognized the emergence of several important aspects of the external environment that have relevance to the design of MCS. These include product life cycles, globalization, networks, and digitization. Each of these will be considered in turn.

Industry analysis has provided a useful basis for examining the development of appropriate strategies that will enable the organization to adapt to business environments and, possibly, change these circumstances to be more advantageous to the organization. However, industry structure is not static and evolves through time, often shifting industries to a point where obsolescence of endowments takes place (Agarwal and Gort 2002). An awareness of industry evolution can assist in developing an outside–in appreciation of strategy formulation to respond to such hazards. Product life cycle analyses provide a way of understanding how an industry and firms within that industry potentially pass through stages involving the introduction of products, rapid growth in demand, maturity, and then decline (Wasson 1978). While industries and firms do not inevitably pass through all stages of product life cycles, an examination of these cycles does alert strategy-makers to the potential growth opportunities or to the impact of sales decline when markets reach maturity (Anderson and Zeihaml 1984). Responses may require decision-makers to develop innovations to capture opportunities or to reposition their operations to avoid decline. Product life cycles have been identified as particularly important in industries, such as computers, telecommunication, and cameras, that require new innovations or modification to existing products every year or so to maintain their competitive edge. Target costing has been proposed as a technique to ensure that products are developed and processes engineered to ensure that novel products can be realized in timely ways to respond to short product cycles (Ansari et al. 1997). However, it is not clear if target costing has gained widespread appeal in Western economies. The life cycle of firms, also, has become important for studying how small- to medium-sized firms evolve into larger entities. Some work in management control has focused on the implication of life cycles for MCS. A study by Moores and Yuen (2001) showed that firms progressing between different life cycles required different types of MCS to sustain their respective strategies. Developing from birth to growth and maturity to revival created a need for more formal MCS designs, with less formal systems evident in transition from growth to maturity and revival to decline.

In recent years outside–in approaches have had to accommodate the fact that many businesses operate in global environments. For many firms the need to become global has moved from a discretionary to an imperative option (Gupta and Govindarajan 2001). When considering the impact of international operations there are two concerns: first, to what extent does globalization present issues related to a diversity of cultures that influence the potential effectiveness of strategies; and second, to what extent does global convergence occur such that strategies can be worldwide. The diversity perspective asserts that cultural differences are so embedded in different countries that national climates present not only unique opportunities for product development but also challenges to monitoring and controlling strategy in ways contingent on local national culture. There is a strong stream of research in MCS that has sought to identify if MCS developed in one country (typically Western countries) can be applied effectively in firms, or divisions of multinationals, in another country that has distinctively different sets of core cultural norms (typically Asian countries). While the results are somewhat indecisive, the topic is important as many firms continue to develop international operations (Harrison and McKinnon 1999).

The second perspective focuses on the view that improvements in infrastructure and communications are resulting in the development of global markets where growing similarities between countries present opportunities to gain global-scale advantages and economies of scope. In this approach global competition requires firms to coordinate strategy across world markets. This presents challenges for coordination and control, with the possibility of strategy being formulated in centralized locations (Ohmae 1990). There are clear implications for the role of MCS in settings characterized by global convergence with the prospect of more formal, centralized planning and controls. The study of the influence of globalization and national culture has generated much debate as to the meaning of culture, its influence on individuals' behaviour, and how it is to be studied (Bhimani 1999). Interestingly, Bhimani (1999: 426) suggests that dissimilarities may be identified in terms of structural configurations within a culture (echoing a content appreciation); however, their modes of realization may differ depending on particular sociocultural characteristics (a process view).

A significant change has occurred in recent years in the way organizations conduct their transactions with suppliers and customers. Traditionally, organizations operated in a highly independent way to source materials, components, and services from a marketplace of suppliers.

Similarly, products were sold to a variety of customers on the basis of price, quality, and other product features. These transactions were at arm's length, conducted under conditions of competition. Recently, organizations have started to develop more cooperative arrangements with a particular supplier and to develop long-term partnerships with customers (Contractor and Lorange 1988; Kanter 1994). These networks involve exploring ways that the collaborating organizations can develop their transactions to gain mutual strategic advantage. Network arrangements may involve occasional joint venture projects and strategic alliances, or more permanent dealings involving, for example, outsourcing arrangements, preferred suppliers, and customer relationships. Such arrangements can provide an internal capability to gain competitive strategic advantage. The choice to develop strategies based on competition or networks has quite different implications for strategy and MCS systems. For competitive situations, strategy formulation typically follows traditional content approaches. However, these traditional content approaches will likely be inappropriate and need refinement in network situations.

The conventional arm's length approach to transactions is based on ideas of independent self-interest, with organizations attempting to get the best deal and gain the dominant position in the trading relationship. However, networking organizations might develop common strategies that accrue benefits to all parties (Best 1990). At the extreme, this collaboration between organizations can become so pronounced that formal controls are substituted with relational or implicit contracts based on trust and mutual advantage (Baxter and Chua 2003). The role of trust has become an important consideration in management controls when considering interorganizational relationships (Tomkins 2001; Chenhall and Langfield-Smith 2003).

While networking has become a popular area for enquiry there are some who are critical of the effectiveness of close relationships between organizations, such as outsourcing. Pinochot and Pinochot (1993: 178–83) contrast the advantages of outsourcing, stressing trade-offs between economies of scale and economies of intimacy, integration and scope, lower fixed costs and sharing of profits, importing outside knowledge and losing inside trade secrets, flexibility in downsizing and loss of internal competencies, focus on core competencies and capacity to grow new competencies. Also, Hamel et al. (1989) argue that self-interest and competition are still important to collaborating partners, with each trying to maximize their gain and minimize that of their partner. The role of MCS in networking situations is just starting to be

understood and researched in accounting. Ittner et al. (1999) reported that performance gains from supplier partnership practices were associated with extensive use of non-price selection criteria, frequent meetings and interactions with suppliers, and supplier certification. These controls were not effective for arm's length supplier relations.

The recent growth of the digital economy has had important implication for strategy and management control (Bhimani 2003). Digitization affects the way interdependencies between organizations and their suppliers and customers are managed. Digitization provides ease of direct access to information that can sustain network linkages by providing for integration across organizational boundaries (Amigoni et al. 2003). There are important challenges to understanding how management control can assist decision-making for managers involved in network linkages and to assess the suitability of alliances and to evaluate their effectiveness.

Digitization can have a significant impact on operations within the firm. Transactions can be conducted without the need for intermediaries such as marketers, purchasers, and distributors. Initial searches can identify potential suppliers and customers and provide the basis for first contact and subsequent transactions. This can increase levels of competition. It can also accelerate the development of virtual organizations as e-systems provide connections between value-adding participants of the virtual organization (Chen 2001; Kauffman and Walden 2001; Saloner and Spence 2001). The implication for adapting MCS to accommodate e-commerce is a rich area for future research (Baxter and Chua 2003).

Inside–out perspective

The inside–out perspective sees competitive advantage being derived from the organization's internal strengths. A resource-based or competencies view of strategy asserts that competitive advantage comes from resources that allow the production of unique goods. To achieve this, the organization's physical, human, and organizational resources have to be rare, inimitable, and without substitutes (Barney 1991). This provides the organization with distinctive competencies (Selznick 1957), a set of core competencies (Prahalad and Hamel 1990) or capabilities to develop strategic advantage (Salk et al. 1992). These unique features can provide a competitive edge over rivals. However, this can lock the organization into its competencies and limit or slow its ability to adapt to different

market situations. Teece et al. (1997) use the term 'dynamic capabilities' to describe not only how organizations combine the development of firm-specific capabilities but also how they renew competencies to respond to the shifts in business environments.

Competencies may be provided by tangible assets that have physical substance such as machines and materials or they may be intangible, involving intellectual capital and provide knowledge-based strategic advantage. Intangible assets typically involve employee know-how and predispositions to the organization, reputation, intellectual property, and favourable relationships with external entities of importance to the organization. While assets can be separated into tangible and intangible, optimal advantage is achieved when organizations coordinate tangible capabilities with employees' skills, knowledge, and attitudes (Prahalad and Hamel 1990). This involves the continual upgrading of unique bundles of competencies that can be used to develop innovative products and services to both satisfy and create markets. Sometimes intangible assets can be made more tangible by codifying knowledge in routines or programmes or more formally in contracts and patents.

While the reporting and management of tangible assets is well developed in content approaches to strategy, intangible assets present many novel challenges. Frameworks have delineated intangible assets as human capital, customer relational capital, and organizational structural capital (Edvinsson and Malone 1997; Stewart 1997). All three categories involve developing explicit knowledge that can be observed and readily transferred and, importantly, tacit knowledge that is difficult to define and transfer, as it is subjective, being acquired through practice (Grant 1996). Developing advantage from tacit knowledge requires the integration of this knowledge by using network lines of communication and team-based structures rather than conventional hierarchical communication and coordination. In these situations, MCS should be flexible, informal, organic, and should be used in interactive ways to facilitate communication and the transformation of knowledge into innovative strategies (Merchant 1985; Simons 2000; Chenhall 2003). Notwithstanding the use of flexible MCS to assist communication and integration of tacit knowledge, the measurement of potential advantage from tacit knowledge is challenging, being difficult to evaluate, report, and audit (IFAC Report 1998).

In recent years considerable attention has been given to developing intellectual capital management as a source of advantage to formulating and implementing strategy. (For a broad-ranging discussion of many issues related to intellectual capital accounting, see the special edition

of the *European Accounting Review* (2003, 12:4). Management control research has attempted to measure this potential source of advantage by way of balanced scorecard (BSC) type approaches or the intangible asset monitor that links customer, structural, and human capital (Sveiby 1997). This follows a content approach to strategy and while such efforts involve the essence of contemporary ideas on management control reporting, it should be noted that considerable challenges remain in understanding the processes involved in understanding and managing the complexity involved in intellectual capital (Fincham and Roslender 2003).

An important area of enquiry is how strategy is implicated in organizational change. Concern with strategic change is inevitable as the formulation of strategy involves considering what needs to be changed to position the organization within its environment, or what is required in terms of resources to adapt to, or influence, its setting. Most organizations face competitive markets, changing technologies, and shifting social preferences that require them to make repeated changes to maintain competitive advantage. However, to understand strategic change it is necessary to clarify what is to be changed and what is 'strategic' about change. This, again, suggests that the meaning of strategy is somewhat elusive.

Content approaches assist in identifying what aspects of the organization can be changed. For example, Kanter et al. (1992) provide extensive suggestions as to what has to be considered to ensure strategic change. This includes, for example, guidelines on environmental analysis to indicate when to change, changing structures and cultures, reengineering technology, and the roles and tasks of change-makers. Waterman et al. (1980) identified seven areas within which changes can occur: structure, strategy, systems, styles, staff, skills, and superordinate goals. Considerable attention has been given to changing production processes by identifying the essential practices within 'continuous improvement', 'process reengineering', and 'kaizen'. Concerns about characteristics of change at the employee level have been addressed in human resource management (Gamache and Kuhn 1989; Kochan and Osterman 1994). The growth in IT has provided opportunities for identifying what has to be changed within IT systems so that they can assist by assessing the desirability of alternative changes in strategies (Mockler 1991, 1992). Data warehousing and mining have become important topics to provide organization-wide approaches to collecting and using data to assist in generating innovative strategies. Other authors have sought to identify characteristics of successful change including the characteristics of the learning organization (West

1994; Carnall 1995), styles of management (Kanter 1982; Kotter 1996), and external and internal sources of change (Huber et al. 1993).

Content approaches have been used to examine the characteristics of successful MCS change. The dominant stream of research has examined the introduction of ABCM. A variety of studies have identified behavioural and organizational characteristics that are associated with effective implementation of ABCM (Shields and Young 1989; Argyris and Kaplan 1994; Anderson 1995; Shields 1995; Foster and Swenson 1997; McGowan and Klammer 1997; Krumwiede 1998; Anderson and Young 1999; Kennedy and Affleck-Graves 2001; Anderson et al. 2002; Chenhall 2004). These characteristics include top management support, linkages to competitive strategy, adequacy of resources, non-accounting ownership, linkages to performance evaluation and compensation, implementing training, clarity of objectives, and number of purposes for ABCM (Shields 1995; Foster and Swenson 1997; McGowan and Klammer 1997).

Another area of interest to content researchers has been the extent to which changes within the MCS depend on the contextual setting. Libby and Waterhouse (1996) found that the number of management accounting system changes relates to the level of competition, decentralization, size, and capacity to learn. Baines and Langfield-Smith (2003) found that competitive environments resulted in an increased focus on differentiation strategies, which, in turn, changed organizational design, advanced manufacturing technology, and advanced management accounting practices (e.g. ABCM, target costing, benchmarking, customer profitability analysis), all of which lead to changes in the use of non-financial information.

Process approaches

While content approaches to strategy do not ignore the processes that have to take place to formulate and implement strategies they see individuals involved in strategy as following a logical process involving patterns of decisions. Individuals are assumed to consciously go through a process of thinking about strategies, to develop and then formulate these into explicit plans. Realized strategy is derived from intended strategies (Mintzberg 1994). Outside–in analysis identifies opportunities and threats and an examination of inside–out factors reveals strengths and weaknesses. A variety of planning and forecasting tools helps

formalize and encourage a rational examination of options and their resource requirements. Strategies are implemented by developing action plans, assigning responsibilities, and undertaking post-completion reviews. Information and control systems provide information on the external situation, help in budgeting what has to be done to effect strategies, and assist in assessing how well strategies are going to plan.

Process approaches acknowledge that the rational, ordered processes assumed in content approaches can be useful but these tend to be appropriate for well-understood routine activities that can be programmed. However, more often the processes involved in strategy formulation involve novelty, with ill-structured ideas emerging from the ongoing operations of the organization (Mintzberg 1987; Quinn 1980). This incrementalist view sees new ideas emerging over time as individuals react to unfolding circumstances by discovering ideas to provide advantage. Ideas that do emerge are often partly conceived and need considerable reflection to develop and become viable. Many of these emergent ideas are abandoned while some form the basis to question the existing direction of the organization and provide the foundation for high levels of innovation and significant advances.

A process approach focuses on how individuals go about decision-making involving strategic issues. Specifically, it recognizes that individuals have cognitive limitations such as limited rationality, they prefer to satisfice rather than optimize, and they have limited information processing capabilities and consequently may not consider all alternatives and may accept a second-best alternative (March and Simon 1958), or take an opportunistic decision to muddle through unplanned situations (Braybrooke and Lindblom 1970). Individuals may be driven to try to find problems to which they can apply their solutions (Cohen et al. 1972).

Formal controls are often de-emphasized in process approaches to strategy. Some commentators stress that they can be an impediment to the process of innovation (Quinn 1980; Mintzberg 1994). Quinn (1980) argues that it is virtually impossible to design formal processes that orchestrate all internal decisions, external environmental events, behavioural and power relationships, technical and informational needs, and actions of rivals so that they come together at any precise time. However, Mintzberg (1987, 1994) identifies how formal controls can assist strategy-making within process approaches. Formal strategic plans can be implicated in the process of crystallizing and affirming consensus and commitment as they occur. However, this may influence the process by forcing premature closure on idea generation. As in content

approaches, planning can be part of the process of elaborating formulated strategy by way of action plans and budgets linked to strategy. However, this is likely to be a useful process only when external circumstances are stable, technologies are certain, and the organization operates within a highly mechanistic structure.

In more dynamic situations, such elaboration of plans will lose relevance as the operating situation changes, making the plans irrelevant. This does not equate to the irrelevance of MCS in more dynamic situations however, only to the irrelevance of a mechanistic approach to understanding their role. At a broader level, MCS can be used to examine how realized strategies compare with intended strategies, with a view to understanding how strategy evolves within the organization. Formal performance and reward systems provide information for both individual's performance to be assessed in terms of meeting planned outcomes and as the basis for a more flexible reassessment of those plans. During this process, plans can be used by some individuals to control others within the organization. This process of control may extend outside the organization when supplier or customer relationships are incorporated within planning schedules.

Formal plans can be used to assist communication processes. This may involve communicating intentions down and across the organization and may provide a basis for communicating ideas up the organization. An emerging stream of MCS research supports the role of MCS in communication (e.g. Simons 1990; Chenhall and Morris 1995; Chapman 1998). Malina and Selto (2001) found that an important role of balanced scorecards (BSCs) was to communicate strategy throughout the organization. MCS can provide a mechanism where emerging ideas being considered throughout the organization can be identified. Emerging ideas can form a critical part in maintaining the innovativeness of an organization's strategy.

Simon's (1995) interactive controls position MCS as an important part of the process of encouraging and identifying new ideas that can present ways to address the strategic uncertainties facing the organization. MCS encourage a process of dialogue and debate between senior managers and others throughout the organization. Some MCS research has shown that the interactive use of MCS can assist innovation (Bisbe and Otley 2004) and strategic change (Abernethy and Brownell 1999). A recent study that develops a framework for understanding the potential of MCS to act in these more flexible roles is Ahrens and Chapman (2004).

It was noted above, in discussing content approaches to strategy and MCS, that strategy and organizational change are important issues in

management control research and that content approaches assist in articulating planned ways of dealing with change. Process approaches to change have been concerned with describing different ways that change progresses and how individuals are implicated in assisting or resisting change. Van de Ven and Poole (1995) present a taxonomy that distinguishes between more formal content-styled approaches and more process-focused approaches. Content approaches are captured by life cycle and teleological approaches. Both assume a regulated approach of change involving stages that are latent within the organization (life cycles) and purposeful constructions of desired end states and methods of selecting alternatives to achieve these states. These can be contrasted with process approaches that are designated dialectic or evolutionary. Dialectic change concerns the struggle between conflicting interests, with stability occurring as a result of the balance of power between these forces. Evolutionary change is the result of a recurrent, cumulative, and probabilistic progression of variation (random chance), selection (survival), and retention (inertia and persistence). The evolutionary, incremental nature of change has been contrasted with radical or revolutionary change by several authors. For example, Jick (1993) and Huber and Glick (1993) distinguish change as developmental (fine-tuning), transitional (evolutionary), and transformational (revolutionary). Tushman and Naylor (1986) see change as incremental, synthetic, and discontinuous. Clearly, the key theme here is whether change is incremental and continuous, or radical and discontinuous.

There is extensive debate as to whether incremental (continuous) or radical (discontinuous) processes are best to explain successful change. In practice, organizations will face different circumstances when one or the other approach will be appropriate. Incremental change involves a gradual process of continuously adapting, improving, and changing. Managers are sensitive to continually acquiring new information, of sharing this across the organization, and of storing valuable explicit knowledge in organizational memory. The 'learning organization' is receptive to the need to unlearn and change the accepted way of doing things. This type of change involves a continual quest for innovation and is best served by structures and decision processes that are flexible and provide opportunities for creativity and acceptance of the uncertainty and complexity generated by the quest for new ideas.

Evidence from content-styled MCS research indicates that a culture of continuous innovation can be encouraged by combinations of formal budgets and organic decision processes (Chenhall and Morris 1995; Chapman 1998) and the interactive use of MCS (Simons 1995; Abernethy

and Brownell 1999; Bisbe and Otley 2004). Approaches following more process approaches have demonstrated that MCS can assist or hinder in the process of change. For example, Dent (1991) found that MCS helped move a railway company's culture from engineering to managerialist. Cost control was identified as a mechanism to encourage a move to a more competitive focus (Knight and Willmott 1993). Simon's (1995) research shows how interactive controls can be used to rejuvenate organizations and sustain change. Miller and O'Leary (1997) showed how the processes involved in using capital budgeting that treated assets as diverse but mutually reinforcing 'investment bundles', assisted in the transition from mass production to modern flexible manufacturing at Caterpillar Inc. In a study of strategy based on flexibility with customers, subcontractors, and innovation, Mouritsen (1999) contrasted the way different managers within a firm perceived control as requiring either a formal content, planning style to manage a 'virtual organization', or a more process-oriented human resource management approach that involves a 'political organization'. A formal content style approach (interactions managed by MCS for planning and monitored) aimed at reducing the uncertainties associated with flexibility, while a more hands-on and labour-focused approach (interactions managed by improvisation based on insight) sought to draw attention to how people and politics managed the processes to achieve flexibility. Both approaches were important as they described alternate but coexisting 'means of management'. There are considerable challenges for future research in understanding how attempts to apply content prescriptions based on rationality combine with processes that result as a consequence of political and behavioural influences. For example, to what extent are processes influenced by formal content, or is formal content established as a consequence of processes?

There are arguments and evidence that formal systems can be an impediment to change. Quinn (1985) argues that any formal resource allocation system is an impediment to change. Process approaches in MCS research have shown how resistance to change can occur as a result of MCS focusing attention on existing activities (Archer and Otley 1991) and structures (Scapens and Roberts 1993; Malmi 1997; Vaivio 1999; Granlund 2001). Roberts (1990) found that formal MCS resulted in an emphasis on the individual, conformity, and distorted communications. Chenhall and Langfield-Smith (2003) found that a gainsharing system and associated formal performance measures were incompatible with efforts to sustain continuous change by implementing self-managed teams.

Combining content and process approaches

In this chapter a distinction between content and process approaches has been made to discuss strategy and management control research. While these distinctions can be helpful in clarifying different approaches, there are many areas of interest that require researchers to contemplate the way both content and process combine to effect outcomes. The chapter concludes by exploring, briefly, several areas of research that can readily be informed by considering both content and process. These are developing learning organizations, organizational inertia, and fads and fashions.

Both content and process approaches have assisted researchers in understanding the continuous change that is an integral part of learning organizations (Stenge 1990; Antal et al. 1994), knowledge organizations (Nonaka 1991; Birkett 1995; Grant 1996), and intelligent organizations (Quinn 1992; Pinochot and Pinochot 1993). The thrust of these approaches is that developing organizational knowledge and intelligence involves more than the application of specific techniques such as reengineering, downsizing, TQM, flat structures, empowerment, benchmarking, and profit sharing (Abrahamson 1996). Rather it is how these techniques are used intelligently by managers and others in ways that involve continuous learning, innovation, and sensitivity to the organization's situation (Kanter et al. 1992: 3–19; Rimmer et al. 1996; Donaldson and Hilmer 1998). Understanding both the evolving design of the content of MCS and the processes involved in their use involves a holistic approach that presents many challenges for future research.

In some instances organizations cannot move in an ordered way to adapt to their situations. Unexpected forces for change may occur; there may be dramatic dislocation in the environment, or there may be significant resistance from within the organization. However, notwithstanding these shocks, some argue that organizations have a tendency towards stability, with internal institutional forces reinforcing the status quo (Dermer 1990: 71). Thus organizational belief systems, formal structures and systems, operating procedures, ways of doing things, and the distribution of power will lead to stability. This may be beneficial to efficient operations supporting existing strategies but can lead to inertia and lack of ability to respond to unpredictable shocks. When change is needed it will have to be radical and comprehensive and involve more revolutionary processes. However, once this pressure is removed, the organization reverts to a period of stability. There are challenges to

understanding the role of MCS as organizations adapt by way of these processes. There has been some interest in examining the growth in dynamic networks as a structural response to revolutionary strategies that have moved firms away from diversified conglomerates to less diversified, focused operations with close linkages between organizations (Davis et al. 1994). It will be important to study the role of MCS as organizations move from these revolutionary changes to periods of more stability within the network organizational form.

Finally, an important aspect of MCS research is the proposition that MCS are adopted not as a rational approach, either incrementally or as a radical response to shocks; rather managers are coerced to adopt the systems, or they mimic developments in MCS that occur elsewhere. Moreover, new MCS are taken up and discarded in the same way as other managerial fads. Institutional theory has been used by some accounting researchers to show the adoption of MCS for coercive or mimetic reasons (Ansari and Euske 1987; Malmi 1999; Granlund 2001; Modell 2001). Several studies have shown that MCS have been adopted to appear rational to external parties (Ansari and Euske 1987; Gupta et al. 1994; Geiger and Ittner 1996). Malmi (1999) showed that the adoption of the innovation of ABC was in the first instance explained by efficient choice, then take-off was influenced by fashion and further diffusion was explained by both mimetic and efficient choice. Several studies have shown that MCS are adopted as a consequence of both institutional forces together with more content-styled approaches that consider rational, technical, and contingent relationships (Ansari and Euske 1987; Geiger and Ittner 1996; Mignon 2003). Mignon (2003) used a process approach employing institutional theory to show how government departments adopted formal public management planning and control techniques. She then used predictions from a content-based contingency framework to show how these formal practices that did not suit context were not used. Rather, informal controls that suited context were used to achieve desired planning and control. Other studies have combined institutional ideas with other process issues such as power relationships that can influence the source of institutional pressure (see Covaleski et al. 1996 for a review). Finally, the role of consultants is also important in instigating and diffusing MCS. Many MCS have been targeted at providing strategic information. Notably, practices such as ABCM and BSCs have been enthusiastically publicized and promoted by their proponents (Kaplan and Norton 1992, 1996, 2001; Kaplan and Cooper 1998) often working with professional accounting and business consulting forms. These approaches, along with many other

management and IT practices, often require organizations to embrace extensive and revolutionary changes to the structures, systems, and ways of doing business. Attention to the subtleties of the processes of change may assist in understanding why many of these content-based innovations have not provided promised benefits.

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