STRATEGY AND CONTROL SYSTEMS

A FRAMEWORK FOR ANALYSIS

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February 1993

The University of Aston in Birmingham

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1993

Thesis Summary

This research explores the links between the strategies adopted by companies and the mechanisms used to control the organisation. This is not seen as a one way process with the control system following from the strategy but rather as an interactive process between the control systems, the environment and the business strategy.

The main proposition of the research, derived from a review of the relevant literature, is that the dimensions of Business Pro-Activity and Environmental Change provide a plausible explanation of the reasons why companies need to adopt different strategies in order to be successful in different markets. A model is proposed which links these dimensions with the business strategy, organisational structure, strategic planning system and management control systems. The model is used as a framework for analysing four companies in order to further our understanding of these interactions and the mechanisms which act to both promote and resist change.

Whilst it is not suggested that the model in its present form is a perfect instrument it has, during the course of this research, proved to be an appropriate framework for analysing the various mechanisms used by four companies to formulate and implement their strategies. The research reveals that these should not be viewed independently but as a balanced system.

Key Words: Strategy; Strategic Typologies; Organisational Structure; Strategic Planning; Control Systems.

For Wendy

Acknowledgements

I would like to acknowledge the great help and support given by my friends and colleagues at Aston University and latterly at The University of Derby.

Particular thanks are due to Wendy who has supported and encouraged me during the writing of this thesis.

I am also thankful for the time given to me by the senior executives and senior managers of the four companies upon which the case studies are based.

I would also like to thank Tony Cox and Ted Davis for their supervision and guidance during the course of this research.

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Chapter 1: Introduction

Over the past ten years strategy has come to occupy an important position in the management and organisational literature. Strategos is a Greek word meaning "general" or, literally, "the thinking and action of a general". A strategy is a framework for action. A strategy provides basic direction. It permits seemingly isolated tasks and activities to fit together, it moves separate efforts towards a common, integrated purpose (Patton, 1990). Chandler (1962) developed the concept of strategy as the exercise of choice by a dominant coalition: strategy is the determination of the basic long-term goals and objectives of an enterprise, and the adaptation of courses of action and the allocation of resources necessary for carrying out these goals. Various avenues have been pursued by researchers. Frameworks have been proposed for analysing the various strategic postures adopted by companies (e.g. Miles and Snow, 1978; Porter 1980, 1985) and their implications for organisational design (e.g. Chandler, 1962; Miles and Snow, 1978). Along with this, the processes of strategy formation and decision making have been explored (e.g. Mintzberg et al, 1976; Hickson et al, 1986). This research concentrates upon the relationship between strategy and the control mechanisms adopted by companies. In particular, those of organisational structure, strategic planning and management control and the ways in which these control mechanisms influence a company's responsiveness to environmental change.

1.1. Contingency Theory

The dominant logic for research into control systems design has become that of contingency theory, which in its simplest form suggests that organisational structures are contingent upon contextual factors (Pugh et al, 1969; Child, 1972). Lawrence and Lorsch (1967) suggest that an organisation which achieves a good fit between its structure and environmental context will be more effective. A number of contextual variables are suggested by the literature: technology (Pugh et al 1969), environment (Burns and Stalker, 1961; Lawrence and Lorsch, 1967; Khandwalla, 1972) and organisational size (Pugh et al, 1969; Blau, 1970; Meyer, 1972; Kimberley, 1976). Relationships between these variables and the degree of formalisation, specialisation, differentiation, integration, centralisation etc. have been investigated (e.g. Mintzberg, 1979) but the results are less than definitive, with weak relationships and fragmentary conclusions (Dent, 1990). Studies by Anthony (1965), Gorry and Scott Morton (1971), Burns and Waterman (1975), Gordon and Miller (1976), Ansari (1977), Mintzberg (1979), MacIntosh (1981), Merchant (1981, 1984) and Gordon and Narayanan (1984) address the structural attributes of planning and control systems and suggest possible design modifications contingent upon the context of their use. Such attributes include tightness of budget goals, use of cost control, frequency of reporting and intensity of monitoring performance results.

A number of reasons can be put forward for the lack of definitive results in determining suitable contingent variables which explain the design of control systems. Dent (1990) suggests: the absence of sufficient data or specificity; that the model is under specified; and that the relationship is determined by the strategic choice of senior management. He suggests that there is a case for exploring relationships between organisations' strategies and control systems, thus recognising strategic posture as an important variable in the contingency framework. A few researchers have sought to extend the contingency arguments put forward by Gordon and Miller (1976) to embrace the relationship between a firm's strategies and the design of its control systems. Under a contingency view of organisational design, it has been proposed that accounting control systems should be designed specifically to suit the business strategy of the firm (Otley 1980; Dermer 1977). Empirical studies in the organisation theory literature point to the potential importance of understanding the relationship between strategy and control systems as a prerequisite to the development of general theories concerning accounting control systems in complex organisations. Notable studies in this area include Govindarajan and Gupta (1985), Merchant (1985) and Simons (1987).

1.2. Strategy and Control Systems Design

One of the earliest studies which attempted to link strategy with control systems design was by Burns and Stalker (1961) who concluded that unstructured, organic organisations with minimal formal controls were best suited to a strategy of innovation. In a later study Miller and Friesen (1982) sought to understand the relationship between product innovation and organisational variables, including the use of control systems. They found that entrepreneurial companies pursuing a strategy of continual product development used control systems as a means of monitoring innovative excess; the degree of control was therefore negatively correlated with firm innovation. In contrast, companies following a conservative strategy used these same systems to become aware of potential opportunities; the degree of control was therefore positively correlated with firm innovation. Khandwalla (1972) in a study a Canadian manufacturing companies concluded that increased competition had the effect of promoting the increased use of sophisticated control procedures. Lawrence and Lorsch (1967) found that companies in such an environment engaged in continuous product development and the search for new market segments, and required elaborate control systems for the purpose of integration. This research points to a link between the use of control systems and strategy but does not differentiate between the type of control system e.g. financial, marketing, human resource management etc. or the emphasis placed on any one system i.e. not all systems are used to the same extent by senior management.

Simons (1987) conducted research to determine the nature and extent of differences in the control systems of companies which follow different business strategies. In his study, control systems referred to "formalised procedures and systems that use information to maintain or alter patterns in organisational activity". These included planning systems, monitoring and reporting systems, but exclude informal control mechanisms such as social and cultural control. Using the strategic typology of Miles and Snow (1978) Simons sought to investigate from an accounting perspective which specific attributes of control system design differ with a firm's strategy. In a later work, Simons (1990) demonstrates how management control systems focus organisational attention on strategic uncertainties and thus influence companies in their choice of strategy.

Other studies have concentrated upon the relationship between strategic change and control systems design, portraying strategic change as the uncoupling from old paradigms and the recoupling to new ones. Hopwood (1987) argues that management control systems can be used in a pro-active way to change organisational perceptions, modes of action and strategic direction. Management control systems select, sort and order bits of data from the mass of cues within and without the organisation (Dent, 1990). They are thus an important medium for shaping participants' perceptions of the organisation's relationship with its environment, and have the potential to filter away inconsistencies, create a sense of security and engender faith in the old paradigms. Alternatively, they have the potential to create ambiguity and foster a sense of insecurity. For example, planning and control systems can be designed to promote a sense of clarity and comfort (thus reaffirming the old rationales for action by orchestrating tasks and responsibilities in an insular way), or they can be designed to promote curiosity and experimentation. Studies by Dent (1990) document the way in which embryonic management notions can become manifest through new systems of planning, accountability and performance measurement, which in turn can provide conditions of possibility for organisational reform and the emergence of new strategies.

1.3. The Present Research

The present research concentrates on the links between the strategies adopted by companies and the mechanisms used to control the organisation. This is not seen as a one way process with the control system following from the strategy, but rather as an interactive process between the control systems, the environment and the business strategy. The study focuses on the strategic dimension of control rather than managerial or operational control, for example, strategic planning is considered but not annual budgets. The research does not attempt to derive causal laws which can be generalised but looks at specific associations between various aspects of strategy and organisational control systems. The purpose is to further our understanding of these relationships. A model is proposed which links the rate of change of the business environment and the degree of pro-activity of the business to that environment with business strategy, organisational structure, strategic planning systems, and management control systems. The model is proposed as a framework for analysis rather than a set of causal laws. As such it has not been empirically validated but rather used to provide a framework which assists our understanding of specific companies and their strategic response to their business environment.

In chapter 2 the literature relating to strategy and control systems is surveyed. The first part of the chapter reviews the literature on the various aspects of strategy: strategy formation, decision making, and strategic change, including the various understandings of the strategic process in order to provide a basis of understanding for the subsequent investigation. The second part of the chapter reviews the literature on strategic typologies and proposes a framework for the subsequent analysis. The third part of the chapter reviews the literature relating strategy and structure, strategy and planning, and strategy and control in order to validate and extend the proposed framework along these dimensions.

Chapter 3 provides a statement of the main propositions together with a definition of the scope of the current research.

Chapter 4 is concerned with the methodology to be used to investigate the propositions: the case study method; the research design; and the conduct of the research.

In chapter 5 the proposed model is used to analyse four companies and their response to the business environment. Companies 1 and 2 illustrate the use of control mechanisms to both enable and promote change within an organisation in response to changes in the business environment, whereas Companies 3 and 4 illustrate the use of control systems by companies which have a set strategy in response to a relatively unfluctuating rate of environmental change.

Chapter 6 discusses the propositions in the light of the cases and suggests amendments to the basic model together with an agenda for future research.

Chapter 2: Review of Previous Work

2.1. Introduction

The first part of this chapter reviews the literature on the various aspects of strategy: strategy formation, decision making, and strategic change, including the various understandings of the strategic process, e.g. intended vs emergent (Mintzberg and Waters, 1982; Mintzberg, 1987a, 1990), and mechanistic/rational vs incremental (Braybrooke and Lindblom, 1963; Quinn, 1980; Morgan, 1986).

The second part of the chapter reviews the literature on strategic typologies from work published in the early 70's e.g. Mintzberg (1973), Utterback and Abernathy (1975), through work by Miles and Snow (1978) and Porter (1980,1985) to more recent work by Zahra and Pearce (1990), Shortell and Zajac (1990) and Speed (1992) which have attempted to provide some validity for the various typologies. Following the work of Hambrick (1983a), Miller (1986) and Segev (1987, 1989), the typologies of Mintzberg, Miles and Snow, and Porter are compared. In particular the dimensions of Business Pro-Activity and Environmental Change are used to show a tentative correspondence between the strategic typologies. It is proposed that these two dimensions provide a plausible explanation of the reasons why companies need to adopt different strategies in order to be successful in different markets. A model incorporating these two dimensions is proposed as a synthesis of this literature review and as a framework for the present research.

The third part of this chapter reviews the literature which investigates the links between a company's strategy and its control systems. In particular the literature relating strategy and structure, strategy and planning, and strategy and control is reviewed in order to extend the proposed model along these dimensions.

2.2. Strategy

In the strategy literature there are a number of interrelated concepts: strategy as process, strategy as competitive position, strategy at the business level and corporate strategy. The strategic process is the management activity inherent in shaping the company's expectations and goals in order to gain competitive advantage (Andrews, 1980). Research on strategy formation focuses on the decision stream, strategies becoming observed patterns of such streams (Mintzberg, 1978, Mintzberg and McHugh, 1985). Strategy formation is seen as the interplay of three basic forces: (a) an environment that changes continuously but irregularly, (b) an organisational bureaucracy that above all seeks to stabilise its actions, and (c) a leadership whose role is to mediate between these two forces, to maintain the stability of the organisation's operating system while at the same time ensuring its adaptation to environmental change. Strategy is then viewed as the set of consistent behaviours by which the organisation establishes, for a time, its place in its environment, and strategic change is viewed as the organisation's response to environmental change, constrained by the momentum of the bureaucracy and accelerated or dampened by leadership (Mintzberg, 1978a).

2.2.1. Strategy as Position and Process

A firm's strategic position refers to how the firm competes in its markets, by means of product and market characteristics, in order to gain competitive advantage. It is concerned with the choices made rather than the process of making that choice. Given that the business environment is constantly changing, a company's strategy cannot be viewed as a single choice followed by action, but rather a stream of choices which have to be constantly modified. Also a particular choice affects the way a company views its environment and hence its ability to make subsequent choices. This distinction between strategy as process and strategy as competitive position may therefore be an unnecessary and unhelpful construct.

2.2.2. Intended and Emergent Strategies

Strategy is not static; rather strategies are formulated and implemented over time (Galbraith and Schendel, 1983). Strategy formulation and implementation are intrinsically intertwined in an incrementally evolving processes (Burgelman, 1983c; Bourgeois and Brodwin, 1984)). In the literature an important distinction is made between intended strategies i.e. those which are intended as guides to decision making, and realised strategies i.e. those which are the outcome of actual decisions. An intended strategy may be realised, but may remain unrealised. Similarly a realised strategy may be as a result of an intended strategy or may emerge as a result of decisions made, with no prior intention, or it may be a combination of both. Realised strategies emerge through events and environmental interactions as they unfold over time. They are inferred through history as organisational activities accumulate to exhibit a consistency or trend (Dent, 1990). This distinction between intended and emergent strategy is one which has received much attention in recent years (e.g. Mintzberg and Waters, 1982; Mintzberg, 1987a, 1990). Is strategy a result of a conscious choice by top management or does it emerge from a stream of minor decisions often made by those lower down the hierarchy? The design school proposes a simple model that views the process as one of design to achieve a best fit between the external threats and opportunities and the internal strengths and weaknesses of the company. The premises of this model of strategy formulation are: that the process is one which can be consciously controlled by the chief executive; that the model is simple and formal; and that the resultant strategies are unique, explicit and simple and appear fully formulated before they are implemented (Mintzberg, 1990).

Mintzberg criticises this view, arguing that there are many difficulties in the conscious assessment of the strengths and weaknesses of a company, that it may not be necessary to make strategies implicit, and that formulation and implementation are an interactive process rather than two separate processes which may be pursued independently. Mintzberg (1987a) argues that strategies are not planned but crafted by managers who have a feeling of intimacy and harmony with the materials at hand, developed through long experience and commitment. He suggests that strategies can form as well as be formulated, and that companies can benefit from allowing their strategies to develop gradually through their actions and experiences. Emerging strategies foster learning as the strategy develops whereas deliberate strategies preclude learning once they have been formulated. The emergent view suggests that the management of strategy is primarily the management of stability, not change, and that the real challenge is to detect the subtle discontinuities that could undermine the business in the future and that therefore the strategist must know the business in order to detect emerging patterns and help them to take shape. The picture is one of nurturing and enabling that which is emerging from within rather than imposing a direction from above. Strategy is viewed as being intuitive rather than as a result of logical thought (Campbell 1991). Intuition is the deeply held sense that something is going to work, grounded in the context in which it is relevant and based on the experience of that context. The market is seen as the test of whether that intuition is correct.

This distinction between designed strategy and emergent strategy should not be seen as a dichotomy but rather as the two extremes of a continuous spectrum (Campbell 1991). Emergent strategies can be seen to interact with and modify deliberate strategies and result in incremental changes in strategy (Braybrooke and Lindblom, 1963; Quinn, 1980). Mintzberg (1987b) suggests that strategy may be defined as: plan, ploy, position, pattern, and perspective. Strategy as plan deals with how leaders attempt to establish direction for organisations and set them on predetermined courses of action. Strategy as plan can also be a ploy, a specific manoeuvre intended to outwit an opponent or competitor. Strategy as position encourages viewing organisations in context, particularly in their competitive environments. As pattern, strategy focuses on action and introduces the phenomenon of consistency in behaviour. Strategy as perspective focuses attention on how intentions diffuse through a group of people to become shared norms and values and how behaviour patterns become deeply ingrained in the group. Organisations require strategy to define themselves, to set direction for themselves, to outwit the competition or enable them to manoeuvre through threatening environments. Strategy is also needed to focus effort and to promote coordination of activity. Strategy both directs the attention of the individuals working within an organisation and gives the organisation meaning for those individuals and for outsiders. Strategy is seen as a force which resists change rather than encouraging it (Mintzberg 1987c). It is seen as necessary to reduce uncertainty and provide consistency, and therefore to give a sense of being in control. This raises the question as to whether strategy is a real phenomenon or whether it is a fantasy which is clung to by management to enable them to function in an unpredictable and uncertain world and to legitamise the organisation. Something which gives them the sense of being in control when the reality is that they have very little influence over the forces which operate upon them and which determine their course. Whittington (1993), commenting on the processual approach to strategy, writes that strategies are a way in which managers try to simplify and order the world which is too complex and chaotic for them to comprehend. The regular procedures and precise quantifications of strategic planning are comforting rituals, managerial security blankets in a hostile world. A similar comment is made by Piercy (1991) who writes that the real function of information in organisations is to construct the model of the world we all have to assume to be true, even though we know it is not true. Information is not just facts and figures, it is about the creation of meaning. Strategy can perhaps be thought of as a construct which enables an organisation to make sense of its interaction with its environment and which guides its deployment of resources. It may be as a result of the conscious choice of management but may also be the unconscious drive which guides the conscious actions.

2.2.3. Strategy Making: Rational or Incremental

The early normative literature on strategy was premised on the mechanistic metaphor of organisation (Morgan, 1986). Strategy making was seen as a linear, sequential, orderly activity initiated by a powerful executive or group who relied upon rational techniques for analysing environmental and organisational resources, generating alternatives, and implementing decisions. More recently a number of researchers have challenged the empirical validity and relevance of this view and put forward an alternative view based upon more complex political and behavioural considerations. Braybrooke and Lindblom (1963) and Quinn (1980) for example see strategy as evolving through disjointed, incremental decisions and muddling through. Often the complexity of strategic issues is such that decisions cannot be made once and for all, but rather they are tackled incrementally. Bower (1970) and Pettigrew (1973) describe the process of resource allocation as a conflictual, multi-level activity around which parochial factions compete. Research by Pettigrew (1985) highlights the importance of personalities, power, context, and the untidiness of chance. Thus such research, in contrast to the rational view, describes the strategy making process as a messy, disorderly, disjointed and political process.

2.2.4. Strategic Change

A related area to that of strategic decision making is that of strategic change. This is the adoption of new competitive postures or alignments with the environment. It may call for the generation of new competitive strengths and distinctive competences and often involves the refashioning of organisational structures and systems to support the new alignments (Dent, 1990). Such change is often difficult to accomplish due to structural and political inertia (Pettigrew, 1985; Miller and Friesen, 1980, 1984; Mintzberg, 1978), and much strategic decision making constitutes an elaboration or refinement of existing strategies. Mintzberg (1978) suggests that strategies unfold in long overarching life cycles, with phases of conception, elaboration, decay and death. Within the life cycle there may be periodic spurts of incremental change or "grafting" followed by periods of consolidation, "sprints and pauses" (Mintzberg and Waters, 1982; Pettigrew, 1985). Inertia to change can also be due to the organisational culture with its shared meanings, interpretations and explanations for events (Berger and Luckman, 1966; Blumer, 1969; Weick, 1979). The particular view of the business environment adopted by management and the shared views as to reasons for actions and interpretations of events will limit the perceptions of management i.e. the information available to management will be filtered by their particular view of reality (Beyer, 1981; Starbuck, 1983; Starbuck and Hedberg, 1977). Thus possibilities for change will not be observed. Piercy (1990) observes in relation to marketing led strategic change that the corporate environment underpins not simply the implementation and tactics of marketing but also the perceptions of the opportunities and threats in the marketing and strategic choices made in the first place. The organisational structure and systems will also cause such filtering to take place. Miller and Friesen (1980, 1984) argue that organisations develop design configurations consistent with their strategies. Over time these design configurations become tightly coupled to the associated strategies, creating a momentum behind these strategies. Bureaucratic inertia constrains the possibilities for strategic change. Organisations delay adapting to environmental change until the magnitude of change renders the opportunity costs of continuing with the existing strategies greater than the cost of structural and strategic realignment.

A further reason for companies remaining stuck is that the existing strategies and structures give the various organisational participants differential access to information and subsequent power to influence decisions. New strategies and structures will open up the possibility for altered patterns of access to information and the exercise of power. Such changes may not be welcomed by the existing holders of such power (Bacharach and Lawler, 1980; Pfeffer, 1981; Walsh et al, 1981). An organisation will thus be stuck unless some organisational learning (Argyris and Schon, 1981) can take place. A way of viewing this resistance to change is to use the concept of a paradigm (Ranson et al, 1980; Jonsson and Lundin, 1977; McCall, 1977; Hedberg and Jonsson, 1978; Brown, 1978), which can be thought of in an organisational context as "the set of beliefs and assumptions, held relatively common through the organisation, taken for granted, and discernible in the stories and explanations of the mangers, which plays a central role in the interpretation of the environmental stimuli and configuration of organisationally relevant strategic responses" (Johnson, 1988). Such paradigms lock organisations into existing strategies, structures and repertoires of action. A change of strategy requires that the organisation uncouples from the current paradigm and re-couples to a new paradigm. Such an uncoupling and re-coupling will involve the management in a reorientation process, using different filters to view the environment, different structures to collect and disseminate information, and new rationales for organisational action (Greenwood &

Hinings, 1988; Johnson and Scholes, 1989). A number of writers (Jonsson and Lundin, 1977; Hedberg and Jonsson, 1978; Beyer, 1981) suggest that an organisation must undergo a crisis before it is prepared to make such a paradigm shift. Only when previous ways of viewing the world and previous modes of reacting fail will it loose faith in the existing paradigm and be open to new ways of viewing the world and new ways of reacting i.e. a new paradigm. Piercy (1990) suggests that the marketing information system may provide a route to changing the "model of the world" to which executives subscribe. In contrast to this Johnson (1988) argues that, "The notion that it is through analysis of the business environment and the competitive position of the firm that managers yield insights into strengths and weaknesses which help identify the needs for and opportunities for change, overlooks the political implications of such analysis. Clarity of analysis is not, in itself, a sufficient basis to break the powerful momentum of the fundamental assumptions embraced within the paradigm, and indeed can actually increase resistance to change." Mintzberg (1978) proposes that the formation of a new paradigm will be as a result of experimentation or "groping", resulting in new conceptions which gain acceptance and appear to work. This process may be aided by the vision of new leaders (Starbuck and Hedberg, 1977) who bring new interpretations of past events and hope for the future.

2.2.5. Organisational Culture

Strategy has been viewed as the response of an organisation to its environment. The previous section considered the problems associated with changing a company's paradigm: its beliefs, values and theories of action. Such a paradigm can be considered as part of the organisation's culture: the deeper level of basic assumptions and beliefs that are shared by members of the organisation, that operate unconsciously and define in basic taken for granted fashion an organisation's view of itself and its environment (Schein, 1985; Morgan, 1993). These basic assumptions and beliefs can often play an important part in the development of strategy (Ansoff, 1981). Johnson and Scholes (1989) comment that environmental forces and organisational capabilities do not in themselves create strategy; people create strategy, and that people are influenced by the culture in which they operate. In organisations which tend to be conservative, where low risk strategies, secure markets and well tried potential solutions are valued, organisational stories are typically concerned with historical stability and consensus, routines and control systems more formalised, and personal relationships also more formal. In organisations in which innovation and breaking new ground are valued, growth strategies, and perhaps high risk strategies, are more likely, and the stories here are likely to be concerned with growth and change, and routines of decision making and control less rigid and less formal.

One of the key determinants of how culture might influence strategic choice is the stage an organisation has reached in its life cycle. Schein (1985) provides a useful discussion of the relationship between life cycle, culture and strategy which is summarised in Table 2.1. This shows how the organisations culture has a tendency to provide an inertia to change. In the embryonic stage the personal beliefs of the founders shape the core beliefs of the organisation and tend to narrow the range of options considered. In the growth stage the tendency is less pronounced due to the influx of new managers, but the emergence of a single dominant culture can promote the preference for one type of strategy. By the time an organisation reaches maturity the culture tends to have become institutionalised to the extent that people within the organisation are unaware of it. The organisation will tend to favour strategies which are evolutionary rather than revolutionary i.e. incremental change, but such responsiveness may not be appropriate if the business environment is subject to rapid change. During decline an organisation's culture becomes a defence against a hostile environment.

Table 2.1 - Culture, the life cycle and strategic choices

Life cycle stage	Key cultural features	Implications for strategic choice
1. Embryonic	Cohesive culture Founders dominate Outside help not valued	Try to repeat successes Related developments favoured
2. Growth	Cultural cohesion less Mismatches and tensions arise	Diversification often possible Vulnerability of takeover Structural change need for new developments New developments need protection
3. Maturity	Culture institutionalised Culture breads inertia Strategic logic may be rejected	Related developments favoured Incrementalism favoured
4. Decline	Culture becomes defence	Readjustment necessary but difficult Divestments prove necessary

from Exploring Corporate Strategy, Johnson and Scholes (1989)

Culture thus provides the mental and emotional framework in guiding the formulation and implementation of strategy (Deal and Kennedy 1983), as well as providing shared relational norms, assumptions and modes of behaviour (Kilman et al 1988). This can be enabling since once employees internalise the values and beliefs of an organisation they will proceed on the basis of what they know to be right, thereby reducing the time spent on discussing priorities and courses of action (Sathe, 1983). Once values have been internalised, however, they may become barriers to subsequent changes in vision and direction. Thus culture can be both an enabling as well as a limiting factor in strategy formation and strategic change (Ahmed and Rafiq, 1992). In support of this view, Johnson (1988) advances the argument that planning and analytical mechanisms are likely to give rise to resistance to change unless they take place within a context where the mechanisms for managing strategic change through social, cultural, political, cognitive and symbolic devices of the organisation are already in place. McKee et al (1989) found that firms with a cultural orientation aligned with a particular strategy sought out markets consistent (or not inconsistent) with that strategic orientation e.g. an Analyser (Miles and Snow, 1978) might seek out relatively predictable environments which would reward its balance of internal-external perspectives.

2.2.6. Strategic Drift

An organisational action view of strategy formation argues that strategy can best be seen as the product of the political, cognitive and cultural fabric of the organisation: that strategic decisions are better explained in terms of political processes than analytical procedures; that cognitive maps of managers are better explanations of their perceptions of the environment and their strategic responses than are analysed position statements and evaluation techniques; and that the legitimacy of these cognitive maps is likely to be reinforced through the myths and rituals of the organisation (Johnson, 1988). These factors, together with the organisational structure and control systems act as a filter to external signals and define the environmental "reality" as perceived by the company's management. Figure 2.1 shows a conceptual model of this filtering process. Whereas Quinn (1980) argues that through environmental sensing the managers of a company continually test out new strategies and, by a process of organisational learning, adjust the company's processes to keep in line with changes in the environment, Johnson (1988) agues that filtering results in "strategic drift". Instead of incrementally adjusting to "reality" the company adjusts its strategy to "perceived reality". This is illustrated in figure 2.2.

<ins>**Figure 2.1 Perceptual Model of Environmental Filtering**</ins>

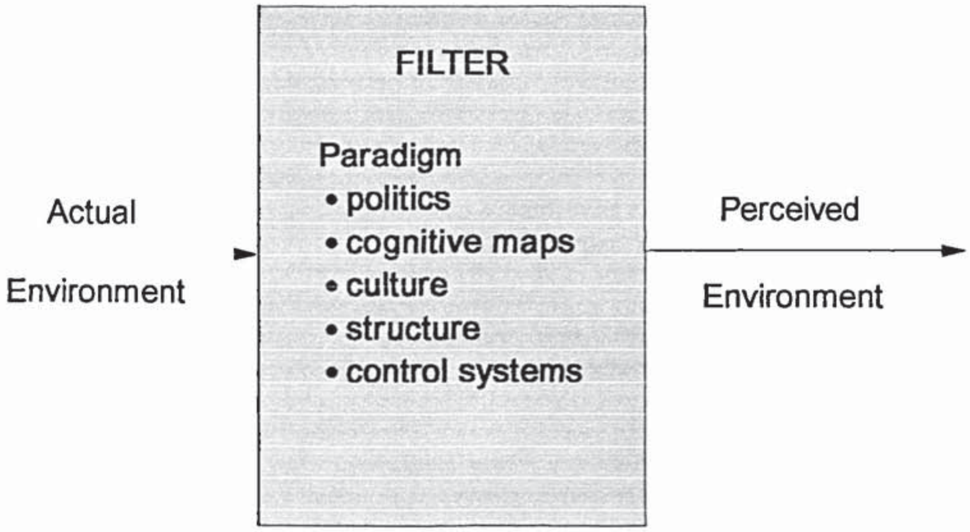
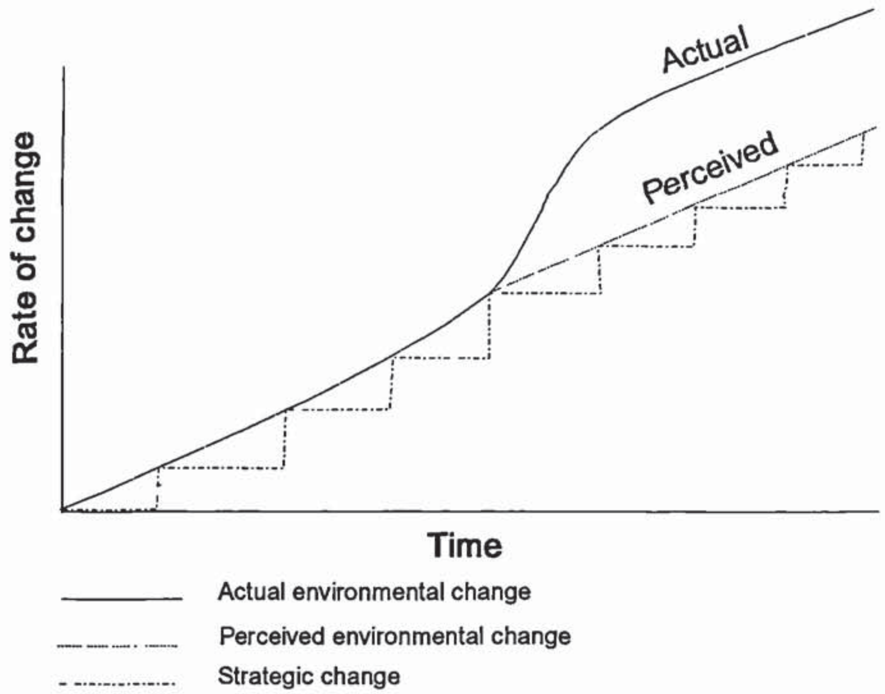


Figure 2.2 Incremental change and strategic drift



This suggests that a company's paradigm is formed as a result of its interaction with its environment. The rate of change of the environment will determine the degree of responsiveness required by the company. As long as this rate of change remains constant the company is able to adjust incrementally, changing its paradigm through a process of organisational learning. A sharp increase (or decrease) in the rate of change results in strategic drift, the organisation paradigm "filtering out" the "hostile" signals.

2.2.7. Strategy: Conclusions

It can be concluded from this review of the strategy literature that there is general agreement amongst researchers that strategy is concerned with the alignment of a business with its environment, but that there are a number of viewpoints and differences in emphasis. Some view strategy as being intended and constructed before the event, others that it emerges from the stream of decisions made by management. Some see it as a rational process whilst others view it as incremental and disjointed. It is seen by some as a way of enabling a company to respond to its environment whereas other see it as one of the causes of inertia to change. It can be a mechanism which enables a company to take a new perspective on its environment but it can also act as a filter to new information and confirm a company in its present position.

This perspective on strategy as the alignment of a company with its environment is used as one of the key elements in the proposed model. The above literature review indicates that this is not a one way process i.e. that strategy is the company's response to its environment, but that a company can, by its strategy, influence the business environment in which it operates. It is submitted for consideration that companies operating in the same business environment may adopt common responses to that environment and that it may thus be possible to group companies in terms of their response to a particular environment. This grouping of companies into recurring patterns of response is covered by the literature concerned with Strategic Typologies. It is therefore essential to review this literature to determine whether any of the existing frameworks can be used as a basis for the proposed model.

2.3. Strategic Typologies

The various patterns of choice made by firms at the business unit and corporate levels have been analysed by a number of researchers. These recurring patterns have been identified empirically and clustered into strategic typologies. Strategic typologies are based upon the assumption that there are a limited number of identifiable strategies, each of which involves a different pattern of competitive objectives, investment strategies and competitive advantage (Hofer and Schendel 1978). Galbraith and Schendel (1983) define a strategic typology as :

> A consistent pattern or combination of managerial controllable or decision components representing scope, resource deployment, and competitive advantages; and the direction in which these components are shifting over time, which characterize the way businesses tend to compete.

This definition incorporates the concepts of strategy as process, as competitive position and the key element of management decision making. It may be criticised due to its lack of emphasis on the changing business environment and the interplay between business strategy and the environment and between the corporate view of strategy and the perceptions of the lower levels of management.

Most strategic typologies are grounded in the belief that firms following different strategies can prosper in most industries by correctly aligning their internal characteristics with their market niche position (Galbraith and Nathanson 1979). Miles and Snow (1978) suggest that their Prospectors and Defenders will perform equally well in most industries if the strategy is well implemented and internal structures are consistent. In contrast to this Porter (1980) believes that strategy is situationally determined and that firms should match their business strategy to their industry environment, with highly dynamic industries requiring more innovative strategies and less dynamic industries being associated with more traditional strategies. Hambrick (1983a) makes the useful point that these are relative constructs i.e. that a firms strategy can only be categorised relative to the tendencies of other firms in the industry. Zahra (1987) found in a study of U.S. Health Care organisations that firms following different strategic postures tended to view their environments differently. Since strategy formation is a continuous process it follows that an organisation's current strategy will influence its degree of monitoring of environmental change and hence its subsequent strategy development. The strategic choice made at a point in time will therefore affect all subsequent choices, including a company's response to environmental change (Child 1972). This inertia effect of the existing paradigm adopted by management was discussed in the previous section. It could also be argued that the adoption of a particular typology or view of strategy by management will limit their attention to the environment and may cause them to become stuck. Rather than being seen as a tool of management and as one way of viewing reality, a particular strategic typology e.g. Porter's Differentiators and Cost Leaders can become the only reality.

Typologies based purely on strategy without reference to business organisation or process have been proposed by Buzzell et al (1975), Utterback and Abernathy (1975), Hofer and Schendel (1978), Vesper (1979), Wissema et al (1980) and Porter (1980). The typology proposed by Mintzberg (1973) is concerned primarily with the process of strategy making. That proposed by Miles and Snow (1978) is not based purely on strategy but also on organisational structure and process variables. Table 2.2 gives a summary of four of the above typologies.

Table 2.2 - Illustrative Studies of Strategic Typologies

Study	Identified archetype	Features
Mintzberg (1973)	Entrepreneurial	Opportunity seeking, founding CEO, bold decisions, growth oriented, high uncertainty.
	Adaptive	Reactive, incremental goal setting, relative certainty in decision-making.
	Planning mode	Analysis dominates decisions, integrated strategies, placid environment.
Utterback & Abernathy (1975)	Performance maximizing	Uncertain environment, offers unique products, searches for new opportunities.
	Sales maximizing	Standard products, more stable environment, high level of competition, some product differentiation.
	Cost minimizing	Standard product, extreme price competition, high efficiency, low innovation, sophisticated control techniques.
Miles & Snow (1978)	Defender	Stable environment, limited product range, competes through low cost or high quality, efficiency paramount, centralised structure.
	Prospector	Always seeking new product and market opportunities, uncertain environment, flexible structure.
	Analyser	Hybrid. Core of traditional products, enters new market after viability established, matrix structure.
	Reactor	Lacks coherent strategy, structure inappropriate to purpose, misses opportunities, unsuccessful.
Porter (1980)	Overall cost leadership	Low price, high market share focus. Standardised product, economies of scale, tight cost control.
	Differentiation	Product uniqueness brings brand loyalty, emphasis on marketing and research.
	Focus	Focus on defined buyer group, product line or geographic market. Niche strategy.

2.3.1. Miles and Snow's Strategic Typology

This section gives a more detailed account of the ideas of Miles and Snow as propounded in Organisational Strategy, Structure and Process (1978). Miles and Snow proposed a relatively complex strategic typology interrelating organisational strategy, structure and process variables within a theoretical framework of co-alignment. The theoretical foundations of this work can be traced back to Child's (1972) categorisation of strategic choice: that major decisions made by management serve to define the organisation's relationship with the broader environment, rather than it being a reaction of the company to the environment. Weick (1969, 1977) similarly proposed that organisations do not automatically respond to pre-ordained environmental conditions but may instead seek to create their own environments through a series of choices regarding markets, products, technologies etc. The effectiveness of organisational adaptation hinges on the dominant coalition's perceptions of the environmental conditions and the decisions it makes concerning how the organisation will cope with these conditions i.e. whether it choses to seek a safe mooring from the ever increasing flow of environmental change, or to go with the stream or even seek to be ahead of it. Such choices will affect the particular strategy a company adopts. Such a strategy will be relative to the industry in which the particular company operates: a firm's strategy can only be categorised relative to the tendencies of other firms in the industry (Hambrick (1983a).

Miles and Snow suggest that organisations must constantly modify and refine the mechanism by which they achieve their purposes, rearranging their structure of roles and relationships and their decision making and control processes. Efficient organisations establish mechanisms that complement their market strategy, but inefficient organisations struggle with their structure and process mechanisms. They proposed that organisations develop relatively enduring patterns of strategic behaviour that actively co-align the organisation with its environment and that once an organisation has developed a particular strategy-structure arrangement it may have difficulty pursuing activities outside its normal scope of operations i.e. it will be stuck in a particular paradigm.

They viewed the "adaptive cycle" characterising this process as involving three strategic "problem and solution" sets: (1) an entrepreneurial problem set centring on the definition of an organisation's product-market domain; (2) an engineering problem set focusing on the choice of technologies and processes to be used for production and distribution; and (3) an administrative problem set involving the selection, rationalisation, and development of organisational structure and policy processes. The administrative problem is seen as that of needing to satisfy two conflicting requirements: to smoothly and efficiently direct the company's existing operations; and to not become so rigid that it inhibits innovation. Such a system is required to be a "lagging" variable in terms of its rationalisation and development of systems to support previous strategic choices, and a "leading" variable which facilitates the company's ability to adapt to new choices and changes in the environment. Adaptation frequently occurs by moving sequentially through the entrepreneurial, engineering, and administrative phases, but the cycle can be triggered at any one of these points. Adaptive decisions made today tend to harden and become aspects of tomorrows structure. A company thus has to judge how pro-active it will be to its environment and to manage its responses in terms of the three problems: product-market, engineering, administrative, accordingly. This idea of a company's pro-activity to its environment will be used subsequently to build a model of strategic types.

Miles and Snow (1978) identify four organisational types for dealing with the adaptive cycle, which they term Prospectors, Analysers, Defenders, and Reactors. Each of these types has its own strategy for responding to the environment, and each has a particular configuration of technology, structure, and process that is consistent with its strategy. These four organisational types have the following general characteristics:

__Defenders__ focus on engineering tasks, placing a high priority on improving efficiency, and are led by a dominant coalition composed of finance and production personnel. They have a narrow product and market focus, seeking to gain expertise in a limited area rather than searching for new opportunities. As a result these organisations seldom need to make major adjustments in their technology, structure, or methods of operation.

__Prospectors__ devote more resources to entrepreneurial tasks, monitoring evolving trends in the marketplace and new product development and are led by a dominant coalition that possesses an expertise in marketing and R & D. These organisations are often the creators of change and uncertainty to which their competitors must respond. They do tend, however, due to their strong concern for product and market innovation to be inefficient in the areas of technology and administration.

__Analysers__ are more complex and balanced functionally. In stable product-market domains, they emphasis production and strive for improved efficiency through the use of formalised structures and processes. In more turbulent product-markets they closely monitor key competitors and adopt only those innovations which appear to have a strong market potential.

__Reactors__ respond to the challenge of the adaptive cycle in uneven and transient ways; they tend to be short-term oriented and environmentally dependent. Because this type of organisation lacks a consistent strategy-structure relationship, it seldom makes adjustments of any sort until forced to do so by environmental pressures. This type of organisation reacts to its environment rather than being pro-active, even to a small degree. It can hardly be considered a strategy at all since it has no clear direction of its own. It has some correspondence to Porter's "Stuck in the Middle" (Porter, 1980) and represents a lack of a consistent response to the business environment .

A detailed analysis of Miles and Snow's descriptions of the four strategic types - Defenders, Prospectors, Analysers, and Reactors, reveals that eleven distinctive strategic dimensions comprise the adaptive cycle (Conant et al, 1990) (see Table 2.3).

A number of studies have been conducted to test the empirical validity of these characteristics but there remains weak or no evidence for a number of them (see Table 2.5). Hambrick (1983a), for example, reports higher research and development and marketing expenditure for Prospectors than Defenders, and higher gross assets per employee, higher value added per employee, and lower direct costs for Defenders than Prospectors i.e the focus of Prospectors is on the external environment, whereas that of Defenders is on internal efficiency. In another study, Snow and Hrebiniak (1980) had managers rate their organisation's strengths across ten functional areas. Managers who identified their organisations as Defenders consistently perceived strengths in general management, financial management, production and engineering. The evidence from research into the Miles and Snow typology suggests that companies which have a high pro-activity to their environment will have a strong external focus, with an emphasis on the research and development of new products and their marketing, whereas companies with a low pro-activity have a strong internal focus, with an emphasis on asset utilisation and efficiency. Both types of company will have strong general and financial management (Snow and Hrebiniak, 1980).

Table 2.3 Dimensions of the Adaptive Cycle and Strategic Type Characteristics

Adaptive cycle components	Dimensions	Strategic Types			
		Defenders	Prospectors	Analysers	Reactors
Entrepreneurial problems and solutions	Product-market domain	Narrow and carefully focused	Broad and continuously expanding	Segmented and carefully adjusted	Uneven and transient
	Success posture	Prominence in "their" product market(s)	Active innovation of change	Calculated followers of change	Opportunistic thrusts and coping postures
	Surveillance	Domain dominated and cautious/strong organisational monitoring	Market and environmentally oriented/ aggressive search	Competitive oriented and thorough	Sporadic and issue dominated
	Growth	Cautious penetration and advances in productivity	Enacting product market development and diversification	Assertive penetration and careful product market development	Hasty change
Engineering problems and solutions	Technological goal	Cost-efficiencies	Flexibility and innovation	Technological synergism	Project development and completion
	Technological breadth	Focus, core technology/ basic expertise	Multiple technologies/ "pushing the edge"	Interrelated technologies/ "at the edge"	Shifting technological applications/ fluidity
	Technological buffers	Standardisation maintenance programs	Technical personnel skills/diversity	Incrementalism and synergism	Ability to experiment and "rig" solutions
Administrative problems and solutions	Dominant coalition	Finance and production	Marketing and R&D	Planning staffs	Trouble shooters
	Planning	Inside/out... control dominated	Problem and opportunity finding/ campaign perspective	Comprehensive with incremental changes	Crisis oriented and disjointed
	Structure	Functional/line authority Centralised	Product and/or market centred Decentralised	Staff dominated/ matrix oriented Both	Tight formal authority/ loose operating design
	Control	Centralised and formal/ Financially anchored	Market performance/ sales volumes	Multiple methods/ careful risk calculations ... sales contribution	Avoid problems/ handle problems .. remain solvent

From Strategic Types, Distinctive Marketing Competences and Organisational Performance: a Multiple Measures-Based Study (Conant et al, 1990)

Adopting such a response to the environment has a number of advantages but also has a number of possible dangers. Miles and Snow (1978) suggest that each of the strategic types have a number of benefits associated with them but also a number of costs and potential risks.

Defenders are not easily dislodged from their position within their industry by competitors due to their detailed knowledge of the products and market. They run the risk, however, of rapid extinction in the event of a major market shift as they are gambling on the continuous viability of their limited set of products and markets. They seek to be technologically efficient by minimising the use of human, financial and physical resources through heavy investment in capital equipment. Such investment has the potential drawback of limiting the organisation's ability to adopt to changes in technology, which may make their existing processes inefficient or obsolete. The administration of the company emphasises the "lagging" aspects of the adaptive cycle, seeking to gain efficiency through specialisation, and centralised decision making and control. The main risk is that whilst such a focus is efficient it may not be effective. The focus on internal aspects of the business may lead to missed opportunities in the external environment. The organisation is also very unresponsive to change due to the rigid organisational structure and procedures. It is thus best suited to an environment which is not changing very rapidly, or to a niche in the market which is remaining relatively stable despite more rapid changes in the rest of the environment e.g. quality sports cars within the general car market.

Prospectors are domain definers and as such are almost immune from the pressures of a changing environment since they are continually keeping pace with the change and frequently creating change themselves. Such an orientation requires the company to be flexible in all its operations, with the consequence that it seldom attains the stability necessary to extract the maximum economic benefit from its chosen products and markets. It also runs the risk of over extending itself by the failure of too many new ventures. The ability to be flexible and innovative requires a workforce which is adaptive to changes in technology. Such a workforce requires lengthy training and commands higher than average remuneration. The company is not able to invest in efficient production methods due to the rigidity which these usually impose. A similar problem arises in the administrative area where the requirement to be flexible can lead to inefficiencies and the under utilisation of resources. The need to be task orientated leads to a more complex organisational structure which requires expensive coordinating mechanisms. This type of organisation is thus best suited to a rapidly changing environment where its flexibility can be exploited to the full.

Analysers, being a combination of both defenders and prospectors gain some of the advantages of both whilst seeking to minimise the risks. The main problem associated with analysers is the maintenance of balance between the stability required by the defender aspects and the flexibility required by the prospector aspects. Because of the need for a dual technological core, the technology can never be completely efficient or effective. The matrix form of organisational structure, with its twin characteristics of stability and flexibility, limits the organisation's ability to move fully in either direction should the environment shift dramatically. This type of company will thus seek the middle ground and will be best suited to an environment which is not changing at a rapid rate but which is undergoing some change, possibly in particular market segments.

Reactors are an unstable organisational type because they lack consistent response mechanisms to cope with changes in the environment. This inconsistency may stem from potentially three sources: (1) management's failure to define a viable organisational strategy; (2) management's failure to change the company's technology, structure and process to implement the strategy; and (3), management's inertia to change, resulting in a mismatch between the strategy-structure of the organisation and the environment. Reactors are a "residual" type being those organisations which have failed to pursue one of the three stable strategies of Defender, Analyser, or Prospector. They are those which have failed to analyse their environment and to make an adequate response to it. They are thus swept along by change rather than being able to steer their own passage through it.

The above indicates that a company has to balance the advantages of a particular strategy with the potential risks. A highly pro-active strategy carries with it the inherent inefficiencies and redundancies associated with the need for flexibility. In becoming more efficient in terms of its production and administration, a company becomes less responsive to environmental change. Its focus has a tendency to become more inward looking rather than being focused on the environment and as a consequence it misses opportunities for innovation. Table 2.3 highlights the contrast between Prospectors who are highly pro-active to their environment and Defenders who have low pro-activity. The highly pro-active response is one which focuses on an active review of the environment, product innovation, flexible and innovative manufacturing methods, a highly skilled workforce, and a decentralised flexible structure with market orientated reporting. In contrast, the company which has low pro-activity to the environment will focus its attention on internal surveillance rather than on the external environment. The emphasis will be on efficiency rather than flexibility, with a small number of standard products which have long life cycles. Control will be centralised and focused upon cost control. Thus it is possible using the above analysis of the Miles and Snow typology to tentatively propose some links between a company's strategy and its organisational structure, strategic planning system and control systems. Such links will be further analysed in subsequent sections with the aim of developing a typology which incorporates these dimensions.

2.3.2. Competitive Strategy : Porter

This section gives a more detailed account of the ideas of Michael Porter as propounded in the two books Competitive Strategy (1980), and Competitive Advantage (1985). Its purpose is to further explore the possible links between strategic typologies and the type and focus of the strategic control systems adopted by companies. Porter suggests that each company has a competitive strategy, either formally developed through its strategic planning process or implicit in the way the company operates. A company without a formal strategic planning process is said to be less likely to adopt the best competitive strategy as its various departments, left to their own devices, will pursue approaches which emphasise their own professional orientation and the preferences of their managers. A company which has a formal planning process will, on the other hand, be able to coordinate its various departments towards a common strategy. The actual process of formulation will increase communication between departments of policy even if the strategy is not actively pursued. Indeed it could be argued that the major benefits of corporate planning are achieved by the process of strategy formulation and the development of the plan and that its subsequent implementation and monitoring adds little to the advantages already gained. These links between strategy and strategic planning systems will be further explored in a later section.

Structural Analysis

Porter (1980) suggests that the industry within which a company operates is a key determinant of the potential strategies available to it. Forces outside an industry do have some effect upon it, for example the general economic climate, but the main force to contend with is the degree of competition within the industry. The state of competition in an industry depends upon five basic forces: threat of new entrants, rivalry, substitution, buyers and supplier, the collective strength of which determine the profit potential of the industry. The goal of competitive strategy for a company within an industry is to find a position where it can best defend itself against these competitive forces or can influence them in its favour. Having analysed the underlying forces which determine the structure of its industry, a company is in a position to identify its own position relative to the industry: its strengths and weaknesses. The company then attempts to take a defensible position against the five competitive forces either by taking offensive or defensive action. Possible approaches are:

- **re-active:** position so that the company's capabilities provide the best defense against the competition;
- **pro-active:** influence the balance of forces through strategic moves, hence improving the company's relative position;
- **awareness:** anticipate shifts in the factors underlying the forces and respond to them, thereby exploiting the change before competitors.

Alternatively, the company may decide to diversify and to use the structural analysis to find alternative industries with potential, or those which relate well with the existing one. Porter's analysis shows the importance of a company's stance towards its environment and indicates that a company's desired pro-activity to that environment will be a major determinant of its strategy.

Generic Competitive Strategies

Porter proposes that in coping with the five competitive forces, companies adopt strategies which enable them to out-perform their competitors. Such strategies enable a company to take offensive or defensive actions in order to create a defensible position in an industry. There are many different potential approaches, depending upon the particular circumstances of the company. Porter (1980) considers that there are three potentially successful generic strategies which will enable companies to out perform other companies within the industry: overall cost leadership, differentiation and focus.

Although a company could pursue more than one strategy as its main target, the effective implementation of any one strategy usually requires commitment, particularly where organisational and reporting structures are affected. Porter (1985) comments that each of the generic strategies involves a fundamentally different route to competitive advantage, combining choice about the type of competitive advantage sought with the scope of the target in which competitive advantage is to be achieved. The cost leadership and differentiation strategies seek competitive advantage in a broad range of industry segments, while focus strategies aim at cost advantage (cost focus) or differentiation (differentiation focus) in a narrow segment as shown in figure 2.3.

Figure 2.3 Competitive Advantage / Competitive Scope

		COMPETITIVE ADVANTAGE	
		Lower Cost	Differentiation
COMPETITIVE SCOPE	Broad Target	**1. Cost Leadership**	**2. Differentiation**
	Narrow Target	**3A. Cost Focus**	**3B. Differentiation Focus**

Cost Leadership

Cost leadership requires the aggressive construction of efficient-scale facilities, vigorous pursuit of cost reductions, tight cost and overhead control, avoidance of marginal customer accounts, and cost minimisation in areas such as Research and Development, service, sales force, advertising. Low cost relative to competitors becomes the main strategic emphasis although quality, service and other areas cannot be ignored. The strategy enables the company to achieve above average returns in its industry despite strong competition. Such a low cost position defends the company against the five competitive forces: threat of new entrants because of the scale economies; rivalry because the low cost means that it can still earn returns after its competitors have competed away their profits; substitution because of the low cost position and hence lower price in relation to substitutes; buyers because they can only drive down prices to the level of the next most efficient supplier; and suppliers because the company has more flexibility to cope with input costs.

In order to achieve such a low cost position, the company often requires high relative market share leading to economies of scale or some other cost advantage over its competitors. The implementation of such a strategy may require product development for ease of manufacture, high capital investment, aggressive pricing, and start up losses to build market share. A cost leader must achieve parity or proximity on the basis of differentiation relative to its competitors to be an above average performer, even though it relies upon cost leadership for its competitive advantage. The cost leader is not attempting to charge the lowest prices within the industry, as this would be a form of differentiation, but to maintain higher than average profits by charging normal prices whilst maintaining low costs.

The strategic logic of cost leadership usually requires that a firm become the cost leader in the market, not one of several firms vying for this position. When there is more than one aspiring cost leader within an industry, the consequences for the companies and the industry can be serious due to the long term effect on profitability and industry structure.

Differentiation

Differentiation is the creation of a product or service which is perceived industry wide as being unique. Approaches to differentiation can take many forms: design or brand image, technology, customer service and should be along several dimensions. The differentiation strategy does not allow the firm to ignore costs, but rather they are not the primary target. The strategy enables the company to earn above average returns in its industry because it creates a defensible position, insulating it against competitive rivalry by the use of brand loyalty. This avoids the need for a low cost position by increasing margins. A differentiation strategy cannot ignore its cost position because the profits arising from premium prices will be wiped out by above average costs. A differentiation strategy must aim at cost parity or proximity relative to its competitors by reducing costs in all areas that do not affect differentiation.

The differentiation strategy again deals with the five competitive forces but in different ways: threat of new entrants because of customer loyalty and the uniqueness of the products; rivalry because of the brand loyalty of customers and the resulting low sensitivity to price; substitution because of customer loyalty; buyers because of the lack of compatible alternatives; and suppliers because of the higher margins.

To achieve such a position may involve the sacrifice of market share, particularly where the element of exclusivity is stressed. Differentiation may also be incompatible with lower costs due to the high investment required in research and development, customer support, advertising etc. In other industries it may be compatible with the low cost position. Unlike the cost leadership strategy, differentiation allows there to be more than one company within the industry pursuing the strategy, providing that each of the companies is differentiating its products in a different way.

Focusing

Focusing is a combination of the previous two generic strategies but narrowed down to a particular buyer group, market segment, or geographic market. By focusing, the firm is able to serve its narrow strategic target more effectively or efficiently than its competitors who are more broadly based. The firm achieves either Differentiation (Differentiation Focus) from better meeting the needs of the specific target, or , more unusually, lower costs (Cost Focus) in serving this market, or both. Cost Focus exploits differences in cost behaviour in some segments, while Differentiation Focus exploits the special needs of buyers in certain segments. The Focus strategy leads to a limitation of the market share achievable, the trade off being between profitability and sales volume.

Porter indicates that the three generic strategies imply differing organisational arrangements, control procedures, and incentive systems. The generic strategies also require different styles of leadership and can translate into different corporate cultures and atmospheres. These features are set out in Table 2.4. which has been structured to allow comparison with Table 2.3. (Miles and Snow). As can be seen, there is a close correspondence between the characteristics of Differentiators and those of Miles and Snow's Prospectors and Analysers, and between Cost Leaders and Miles and Snow's Defenders. Such common characteristics will be used subsequently to suggest the characteristics of the proposed typology.

Table 2.4 Strategic Type Characteristics: Porter

		Strategic Types	
		Differentiators	Cost Leaders
Entrepreneurial	Product-market domain	Can be broad or focused on specific segments.	Core markets.
	Success posture	Strong marketing abilities. creative flair. Reputation for quality or technological leadership. Perceived uniqueness of product.	Lowest cost producer, low cost distribution system, high relative market share.
	Surveillance	Market, competitors. Active search for new products and markets.	Strong organisational monitoring.
	Growth	Innovative products.	Productivity improvements
Engineering	Technological goal	Technologically innovative products.	Product design for ease of manufacture.
	Technological breadth	Strong capabilities in basic research. Product engineering/ manufacturing flexibility.	Focus on core technology.
	Technological buffers	Highly skilled labour, scientists, and creative people.	Process engineering skills.
Administrative	Dominant coalition	R&D, product development, marketing.	Finance and production.
	Planning	Strategic, flexible, qualitative and quantitative.	Financial. Substantial capital investment.
	Structure	Flexible structure. Strong integrating/ coordinating mechanisms.	Structured organisation and responsibilities.
	Control	Surveillance	Tight cost control. Frequent, detailed control reports, quantitative targets. Incentives based on meeting strict quantitative targets.

Stuck in the Middle

The three generic strategies are alternative, viable approaches to dealing with the competitive forces. A company which fails to develop its strategy in one of the three directions, e.g. "Stuck in the Middle", is in an extremely poor strategic position. It lacks the market share, capital investment and cost control to be a cost leader, and the marketing ability, quality and technology to sufficiently differentiate its products from those of its competitors. It loses high volume, low margin business to lower cost producers, and lower volume, high margin business to companies who have sought to differentiate their products. This lack of focus is often reflected in a blurred corporate culture and a conflicting set of organisational arrangements and motivation system. A company seeking to move from this "Stuck in the Middle" position to one of the generic strategies may encounter a great deal of corporate inertia. To achieve a position of cost leadership or at least cost parity it must make aggressive capital investments and seek to buy market share. To achieve a position of differentiation it must rationalise its businesses to certain core areas which may mean the loss of market share and a drop in absolute sales. Such changes in strategy must also be reflected in corresponding changes in the corporate culture, organisation structure, controls and reward systems.

Usually a company must make a choice between the generic strategies or it will become stuck in the middle. The benefits of pursuing a focus strategy by optimising the company's orientation towards a particular market segment cannot be gained whilst at the same time seeking to serve a broad range of segments (cost leadership and differentiation). Such a strategy may be possible where the company is organised into distinct divisions or business units which have a high degree of autonomy. Such separation must be strict or the confusion of strategy will lead to the company being stuck in the middle. The pursuit of different strategies by each division of a company may also lead to confusion of strategic direction at head office level. Such schizophrenia may be difficult to sustain in the longer term due to the conflict in the organisational, control and cultural requirements of each strategy (Porter 1985). Porter notes that there is a tendency for diversified companies to pursue the same generic strategy in many of their business units because skills and confidence are developed for pursuing a particular approach to competitive advantage.

Risks of the Generic Strategies

The main risks in pursuing the generic strategies are, firstly, in failing to attain or sustain the strategy and secondly, the erosion of the advantages of the strategy due to changes in the industry. The other risks are due to changes in the competitive forces against which the company wishes to defend by adoption of a particular strategy. Cost leadership is particularly vulnerable to product or technological change which renders previous capital investment redundant. Differentiation is particularly vulnerable to competitors who adopt a cost leadership position and whose lower prices more than compensate for the loss in features which differentiate the company's products. The focus strategy is vulnerable to being undercut by larger low cost competitors, or by product differentiation by larger "brand image" companies. The focus company may also be "out focused" by competitors who find a sub- market of the company's focus market.

2.3.3. Validation of Strategic Typologies

If strategic typologies are to be used in the subsequent analysis their empirical validity must be established i.e is it valid to assume that companies can be grouped according to patterns of strategy, or must each company be considered as unique. Hambrick (1983a) comments that studies of typologies have (a) assumed their validity and (b) relied on subjective assessment of strategies or accompanying variables. Zahra and Pearce (1990) observe that the development of typologies is often aided by an investigator's insight, intuition, and experience, and therefore typologies are not easy to replicate empirically. In addition, they tend to be somewhat simplistic because they focus on extreme or suggested configurations. Consequently, typologies tend to be imprecise. The majority of studies have attempted to utilise, rather than validate, the typologies. An example of this is Conant et al (1990) who developed a new multi-item scale for operationalising the Miles and Snow strategic typology. The multi-item scale and the more traditional paragraph approach were used to analyse the relationship between strategic types, distinctive marketing competences, and organisational performance.

Miles and Snow

Zahra and Pearce (1990) comment that the Miles and Snow typology was presented on the basis of theory, rather than on extensive empirical work, and therefore its general validity and reliability in different settings has never been established. Secondly, the best approach to using the typology has never been determined, so operationalisation is problematic. Thirdly, since the typology is based on observation or organisational features, classification of organisations will be based on these chosen features at a given point in time. It does not allow for those organisational variables which relate to process. Table 2.5 reproduces A Summary of Research Coverage and Support of the Miles-Snow Typology (Zahra and Pearce, 1990). As can be seen, there is strong support for the existence of distinctive strategic types and the link between environment and strategy but only mixed or weak evidence for the other dimensions of the typology. The proposed model uses this dimension of the interaction of strategy and the business environment as its main dimension. It should be noted that the table indicates that there has been no previous research which verifies the link between strategy and the internal organisation of the company i.e that companies with different strategic types will utilise different organisational structures and control mechanisms. It is the main purpose of the present research to investigate this link.

Table 2.5: A Summary of Research Coverage and Support of the Miles-Snow Typology

Dimensions	Typology's Position	Past Research Coverage	Past Research Support
1. Existence of Distinctive Strategic Types	Four types exist	High	Strong
2. Environment-Strategic Link	Strategic groups exist in different environments	Moderate	Strong
3. Entrepreneurial Problem	Strategic types differ in the way they define their domain	Low	Mixed
4. Engineering Problem	Strategic types differ in the way they choose production technology	Low	Weak
5. Administrative Problem			
(a) Environmental Analysis	The groups differ in the intensity of their environmental scanning effort	Low	Weak
(b) Functional Importance	Strategic groups differ concerning their relative emphasis on the various functions within the firm	Moderate	Mixed
(c) TMT Composition	Strategic groups differ in their recruitment practices relating to the TMT concerning		
	- functional background	Moderate	Weak
	- source (internal vs. external	Low	Weak
	- age median	Low	Weak
(d) Internal Organisation	Firms of different strategic types will utilize different organisational structure and control mechanisms	None	Unknown
(e) Management Philosophies	Managers will emphasis different human resource philosophies depending on the strategic type of the organisation	None	Unknown
6. Competitive Devices	Strategic groups will differ in the devices types used	Low	Weak
7. Performance	Defenders, Analysers & Prospectors are equally effective	Moderate	Mixed

From Research Evidence On The Miles-Snow Typology, Zahra and Pearce (1990)

Speed (1992) comments that the principal evidence for the validity of the Miles and Snow typology arises from the large range of studies where supporting findings have been encountered, for example, a study by Shortell and Zajac (1990) attempted to assess the reliability and validity of the various dimensions of the Miles and Snow typology using both perceptual self typing and archival data. In particular they found support for the entrepreneurial and administrative component of the typology. Snow and Hrebiniak's (1980) study of randomly selected firms in four industries found managers reporting the existence of each of Miles and Snow's (1978) strategic types in each industry.

Hambrick (1983a) comments that the key dimension underlying the Miles and Snow typology is the rate at which an organisation changes its products or markets. Using the Profit Impact of Market Strategies (PIMS) database he found that even though organisations may be very adept at managing continual change, e.g. Prospectors, such organisations cannot prosper financially unless their markets continually seek new products. Only in such a situation are the Defenders and Analysers kept from exploiting their efficiencies and thus offering the product at a lower price than the prospector can afford. It is suggested therefore that the Prospector strategy, in its purest form, is relatively uncommon and relatively temporary. This contradicts the premise of Miles and Snow that strategies tend to be enduring. Hambrick found that in mature non-innovative industries, Analysers faired better than both Prospectors and Defenders. Prospectors had lower returns due to inefficiencies and higher investment in R & D, whereas Defenders had lower returns due to heavy price competition. This also contradicts the view of Miles and Snow (1978) that the three types would fair equally well in any industry, providing the strategy were well implemented. A criticism of Hambrick's research and hence the validity of his conclusions is that he is drawing longitudinal conclusions i.e. about a company's response to change, from what is essentially cross-sectional data. Any conclusions made must therefore be treated with caution.

Porter

The typology proposed by Porter (1980, 1985) is based upon economic theory and case observation of a variety of businesses. Again, there has been little research which attempts to validate the model. Research by Dess and Davis (1984) found that commitment to at least one of the three generic strategies resulted in higher performance than if a firm failed to develop a generic strategy. Hambrick (1983a) found strategies of Cost Leadership, Differentiation and Focus among high performing firms in his analysis of the capital goods industry. In both these cases each of the firms exhibited either a Differentiation or a Cost Leadership strategy. In contrast to this, Miller and Friesen's (1986) analysis of consumer durables manufacturers found that Differentiators also exhibited Cost Leadership characteristics, and Cost Leaders exhibited significant elements of Differentiation. Miller and Friesen (1986) attribute this result to the relative ease which firms operating in the consumer durables market differentiate their products through advertising, without any underlying quality enhancements, in contrast to the firms operating in industrial markets.

Miller and Dess (1993) assessed Porter's model in terms of simplicity, accuracy and generalisability using the PIMS database. They concluded that the simplicity of Porter's model captures much of the complexity inherent in strategic gestalts but that performance norms varied significantly across strategic types and that the model is possibly more contingent than generic, thus limiting its generalisability. In particular, the strategies adopted were contingent upon the environment in which the businesses operated.

Cluster Analysis

A major criticism of the above research using strategic typologies is that the validity of the typologies is assumed and as a result data is collected along the dimensions which they propose, thus biasing the results. What is required is a method which can provide independent validation of the typologies from previously unstructured data i.e. where the dimensions of the study and the categories of questions do not assume the underlying structure. A method which appears to overcome this criticism and use unstructured data is cluster analysis. A number of researchers have used classifications based on this method (Galbraith and Schendel, 1983; McDaniel and Kolari, 1987; Smith et al, 1989; Hooley et al, 1992). Speed (1992) comments that such a method has several theoretical advantages. Firstly, the resulting classification is "objective" in the sense that it is not based on the judgement of respondents or investigator, nor on an arbitrary decision rule but on a proximity calculation. One of the problems with cluster analysis, however, is the wide variety of algorithms which have the potential to generate divergent results. An important element of using cluster analysis is the validation of the cluster membership with respect to changing the algorithm used and changing the sample. Speed comments that one problem common to many strategic typologies is the existence of a "residual" grouping. Frequently the originators have described a final category which is primarily negatively defined i.e. in terms of what is not rather than what is. For instance, in the Miles and Snow typology, Reactors are a residual grouping, and in the Porter typology it is "Stuck in the Middle" which is the catch all. Thus there is again a temptation to bias the analysis of the observed results in favour of known typologies, those which do not fit being placed in the residual group.

In one investigation using cluster analysis, Smith et al (1989) measured strategic types through multi-item scales and then utilised principal components factor analysis to identify four clusters. These four clusters were then interpreted in terms of the Miles and Snow typology. They were able to successfully identify Analysers, Prospectors and Reactors, but the identification of Defenders was less satisfactory, being a somewhat heterogeneous group. Hooley et al (1992) used a combination of marketing variables to describe strategic marketing types and their relationship to market served, corporate attitudes and performance. Hierarchical clustering was employed to look for generic marketing strategies, and five distinctive groupings were found which correspond to the Porter typologies of Differentiation, Focused Differentiation (two groups), Focused Cost Leadership, and Stuck in the Middle. With the exception of Differentiation the strategies identified involved a high degree of focus, this being due to the sample being comprised of single business companies who tend to be small or medium sized. Such companies would tend to compete by adopting a focused strategy rather than an broad industry one. In particular, such a company would be very unlikely to be a Cost Leader. Two of the strategic groupings were also found to possess characteristics of Miles and Snow's (1978) Prospector and Defender categories. but their Analysers and Reactors categories found no close parallels. Thus there are some empirical investigations which support parts of the strategic typologies proposed by Miles and Snow, and Porter but none of them provide conclusive proof of their validity.

Limitations of Scope

A further cause for concern is that both empirical research and anecdotal evidence give reason to believe that differences may occur in competitive strategies from one country or region of the world to another. The vast majority of research relating to generic strategy types has been conducted in relation to U.S. businesses and markets and there appears to have been less interest in examining the extent to which these findings are able to be generalised to businesses and markets outside the U.S., for example, companies of different national origins or organisational types may pursue different competitive strategies due to different management philosophies, or goals and objectives. Companies may also use different strategies to penetrate overseas markets due to differences in the competitive market environment. Douglas and Rhee (1989) found in a study of U.S. and European companies, based on a sample of industrial businesses drawn from the PIMS database, that the basic component of competitive strategy and the same generic competitive strategy types appeared in both U.S. and European businesses. They noted, however, that the specific characteristics of certain types may vary, as do their business characteristics and performance. Further research is required to test the validity of these generic strategies across national and cultural boundaries.

Summary

A number of problems in the use of strategic typologies have been highlighted. These are in relation to the empirical validity of specific typologies rather than Strategic typologies in general. Cluster analysis has shown that the strategies adopted by companies form consistent patterns and that such patterns can be used to classify companies. That such patterns are able to be generalised to all companies has not been empirically validated, in particular the international dimension. One way of overcoming this problem is to regard a particular typology as a model which assists management to order reality i.e. the particular business environment in which they operate. It is suggested that such a model should not be regarded as the only reality but as a means to give some structure to the apparent confusion. As was noted in the section on strategy, strategy (and hence Strategic

Typologies) can perhaps be thought of as a construct which enables an organisation to make sense of its interaction with its environment and which guides its deployment of resources i.e. a paradigm. When going through a crisis a company may well seek to uncouple from the old paradigm and couple to a new one. Strategic Typologies are, in some sense, off-the-peg paradigms which reduce the period of experimentation or "groping" which a company must undergo. They may not be a perfect fit but do provide something to which alterations can be made. This is possibly why the Porter typology has become such a useful tool, not because it perfectly fits every company, in every industry, but because it is a close enough fit for the majority of companies. It provides an alternative paradigm upon which to build.

Table 2.5 indicates that there has been little or no research into the links between strategic typologies and a company's internal organisation: organisational structure and control mechanisms. There has however been research into the links between strategy and structure, strategy and strategic planning, and strategy and control. It is important therefore that this literature be reviewed to find possible support for the suggested links and, where possible, to build these dimensions into the proposed model. This literature will therefore be reviewed in subsequent sections. The other dimensions proposed by Miles and Snow do not form part of this present study. The analysis in Table 2.5 indicates that previous research does provide strong support for the existence of distinctive strategic types and for the link between the business environment and these strategic types. One of the purposes of the present research is to investigate this link. In a subsequent section this link is discussed and a proposition made that the dimension of pro-activity to the environment as one upon which strategic typologies can be analysed.

2.3.4. Links between Strategic Typologies

The typologies of Mintzberg, Miles and Snow, and Porter appear at first inspection to be mutually exclusive but closer examination reveals some similarities. Each of the typologies purport to be able to be generalised to all companies, although they have been postulated based upon specific industries. It therefore follows that they are referring to the same phenomenon and that the various patterns are not mutually exclusive, but that certain of the competitive characteristics can be logically grouped. Intuitively, firms adopting an overall Cost Leadership strategy (Porter, 1980) will tend to be Defenders (Miles & Snow, 1968), Cost Minimisers (Utterback & Abernathy, 1975), and be Adaptive (Mintzberg, 1973). On the other hand, firms adopting a Differentiation strategy (Porter, 1980), will tend to be Prospectors (Miles and Snow, 1968), Performance Maximisers (Utterback & Abernathy, 1975), and be Entrepreneurial or Planning (Mintzberg, 1973). The literature contains a number a studies which have attempted to provide empirical evidence for such links (Segev 1987, 1989). Each of the main typologies, however, uses a different determinant of functional characteristics. Miles and Snow's, for example, uses product innovation whereas Porter uses a structural analysis of the industry in which the company operates. The typologies may also differ in their orientation, one stressing the process of strategy making e.g. Mintzberg's Entrepreneurial, Adaptive and Planning modes and the other the strategic position or content, e.g. Miles and Snow's Defender, Prospector, Analyser and Reactor strategies.

One of the difficulties for research in this area is therefore the seeming conflicting views and analyses of the same phenomena. A number of ways forward are possible: to adopt one of the typologies as the basis of the analysis, thus narrowing the scope of the analysis; to propose a new typology which is unrelated to those in existence, thus adding to the confusion; or to attempt to provide a synthesis of the existing typologies, drawing out the differences and using these to add richness to the analysis. In this study the latter is adopted. Subsequent sections are therefore concerned with the possible links between the typologies of Mintzberg, Miles and Snow, and Porter, and the development of a typology which draws upon the richness which these contain.

Links between the Strategy Making Modes of Mintzberg and the Strategic Types of Miles and Snow

The literature contains some evidence for links between the strategy making modes of Mintzberg and the strategic types of Miles and Snow. Using self typing by the top executives of businesses, Segev (1987) found tentative links between the strategy making modes of Mintzberg (1973) and the strategic types of Miles and Snow (1978). He found that the Entrepreneurial mode of strategy making is mostly employed by Prospector and Analysers, less by Defenders, and least by Reactors. The Adaptive mode is used mainly by Reactors, less by Analysers and Defenders and least by Prospectors. No conclusions about the Planning mode could be drawn from the study. Table 2.6 summarises the various tentative links found.

Table 2.6: Analysis of Strategy Making Modes (Mintzberg) by Strategic Type (Miles and Snow)

	Strategy Making Mode		
Strategic Type	Entrepreneurial	Adaptive	Planning
Defenders	Low compatibility	Fairly compatible	Some compatibility
Prospectors	Most compatible	Least compatible	Least compatible
Analysers	High compatibility	Fairly compatible	Some compatibility
Reactors	Least compatible	Most compatible	Least compatible

This study is largely supportive of the theoretical parallels suggested by Burgelman (1983a). He proposed that the Prospector type is most compatible with the Entrepreneurial mode, both being characterised by an active search for new opportunities, whereas the Reactor type is the least compatible since such organisations take less risks than their competitors and respond only when forced by environmental pressures. The Defender likewise has low compatibility with the Entrepreneurial mode since these organisations look for relatively stable niches in product or service areas, and then strive to maintain them. They try to do the best job possible in a limited area, but tend to ignore changes in the industry. The Analyser type is seen by Hambrick (1983a) as a hybrid Defender-Prospector and as such is proposed to have a high compatibility with the Entrepreneurial mode, but not as high as the Prospector. The Adaptive mode of strategy making reflects a division of power among members of a complex coalition and clear goals do not exist. Solutions to existing problems are reactive rather than pro-active. Of the four strategic types, the Reactor is the most compatible with the Adaptive mode and the Prospector the least compatible. Defenders and Analysers are fairly compatible with the Adaptive mode since they seek to maintain a limited line of products or service, and are assiduous in protecting their niches. The Planning mode, where the costs and benefits of competing proposals is systematically analysed, and decisions and strategies integrated, is seen to exhibit some of the characteristics of the Defender strategy, with its concentration on internal efficiency, possession of information on major competitors, ability to maintain and protect a secure niche for relatively long periods, and its decisions regarding how to be different from its competitors. It is also seen to possess some of the characteristics of the Analyser strategy with its careful monitoring of major competitors, the focus on cost efficiency, the gradual change in existing products and markets, and the careful selection of new developments.

On the other hand, the Prospector and Reactor strategies are considered to be the least compatible, Prospectors because of their quick reaction to the environment, their innovation and their willingness to take risks, and Reactors because of their conservatism, lack of consistent product-market initiative, reactions to external actions and their very low risk taking.

The above studies have sought to provide a link between the process of strategy making proposed by Mintzberg (1973) and the strategic positions proposed by Miles and Snow (1978), the supposition being that a best fit between them will lead to a higher performance for the company. The strategic type which emerges may not be a conscious choice by the senior management of the company but may emerge due to the strategy making mode of the company. This has parallels with the earlier discussion as to whether strategies are the result of conscious choice or are emergent. Mintzberg (1987a) argues that strategies emerge from within the organisation and hence that the process is a major determinant of the eventual strategy. The Entrepreneurial mode of strategy making is likely to result in a Prospector or Analyser type strategy, the Adaptive mode in a Reactor strategy, and a Planning mode in either a Defender or Analyser strategy. Thus a major determinant of the eventual strategy is seen as the existing culture of the organisation rather than its environment, although it could be argued that a company's culture is a reaction to the environment in which it operates. If the alternative view is taken, i.e. that strategies are deliberate, being formulated through a conscious, sequential process, then an explanation of the proposed links must be given in terms of the best mode to formulate the intended strategy. Work by Burgelman (1983a) and Hambrick (1983a) indicates that companies wishing to develop particular strategies will adopt particular strategy making modes: Prospectors will adopt an Entrepreneurial mode; Analysers an

Entrepreneurial or Adaptive mode; and Defenders an Adaptive or Planning mode. Such modes fit with the focus of the information required i.e. internal or external, product or market, and the degree of risk associated with the chosen strategy.

In this section a clear link has been made between the strategy making modes of Mintzberg and the strategic typology of Miles and Snow. In the next section links are sought between two strategic typologies: those of Miles and Snow (1978) and Porter (1980), these being the typologies upon which most previous research has been based.

Links between Strategic Types: Miles and Snow, and Porter

Miles and Snow (1978) suggested four strategic types: Defenders, Prospectors, Analysers and Reactors, based in the most part on an organisation's orientation toward product-market development. Porter (1980) suggested that in any industry there are three potentially successful generic competitive strategies: Overall Cost Leadership, Differentiation and Focus, either as Focus-Cost Leader or Focus-Differentiation. Porter also described an unsuccessful strategy which he called "Stuck in the Middle". These two strategic typologies both describe the same phenomena yet stress different aspects of business level strategy. Govindarajan (1986) noted that the two typologies use different criteria to classify business level strategies but that both could be used to increase the dimensions along which a company can be categorised. He compared Differentiation with Low Cost and Defender with Prospector but did not attempt to integrate the two typologies. His work however reveals links between Differentiation and Prospector, and Cost Leader and Defender. Hambrick (1983b) suggested the two typologies are not incompatible, rather that their juxtaposition indicates the complex web of strategic options available to a business and the difficulty in trying to classify such options concisely. He also suggested the following partial analogies between the typologies: the Prospector is a particular type of Differentiation; the Defender is another type of Differentiation or a Cost Leader, or both; and the Reactor is "Stuck in the Middle". No analogies for Analyser or Focus were suggested. Miller (1986) suggests that there are four broad categories of variables or dimensions that reflect important competitive strategies. They are Differentiation, Cost Leadership, Focus, and Asset Parsimony. Differentiators is seen as being of two types: innovating Differentiators who differentiate by new products and technologies (Miles and Snow's Prospectors); and marketing Differentiators who differentiate by offering an attractive package, good service, convenient location, and good product/service reliability. They are rarely first in the market with new products (Miles and Snow's Analysers). He associates Cost Leadership (Porter) with Defenders (Miles and Snow).

Porter sees a firm's strategy as a response to its environment, and the industry within which the company operates as a key determinant of the potential strategies available i.e. not all strategies are suitable for all industries. The key determinant of the Miles and Snow typology is the rate at which a company changes its products or markets, whereas that of the Porter typology is the degree of competition within the industry. These two should not, however, be seen as entirely independent of each other if the dimension of rate of change of the business environment is introduced. A company operating a highly competitive market which is changing rapidly will, of necessity, need to have a high rate of new product development. On the other hand, a company operating in a competitive market, which is changing at a lower rate, will have less emphasis on new product development and more on cost efficiency and product differentiation through marketing.

Porter's possible approaches to combating the competitive forces within an industry have very close correspondence to the Miles and Snow typology. He notes that the possible approaches are: re-active, which corresponds to Defenders; pro-active, which corresponds to Prospectors, and; awareness, which corresponds to Analysers. Thus an important dimension in Porter's typology is again the degree of pro-activity of the company in relation to the business environment. A Cost Leadership strategy requires the company to focus itself inwards, concentrating on producing existing products at the lowest cost whilst maintaining quality and customer service. It therefore will have a low level of pro-activity in relation to new product and market development and a low ability to respond to environmental change due to high investment in cost saving technologies.

Miller (1986) suggests that Differentiators can be divided into two sub-types, Innovative Differentiators, who are active in new product development, and Marketing Differentiators who are rarely first in the market with new products but who differentiate by offering such features as attractive packaging, good service and product reliability. An Innovative Differentiator gains its competitive advantage by product uniqueness and as such is more likely to maintain its position in a rapidly changing environment. A slowly changing environment would not offer the opportunities for new product introduction which it requires in order to remain competitive unless there were some barriers to product imitation e.g. patent rights, access to rare raw materials. Such companies tend to drive the rate of environmental change rather than being driven by it i.e. they are highly pro-active. Marketing Differentiators are less pro-active than Innovative Differentiators seeking to differentiate their products by features other than innovative design. They will vary in their degree of response to the changing environment, some seeking to follow Innovative Differentiators by imitating their products but offering other features e.g.

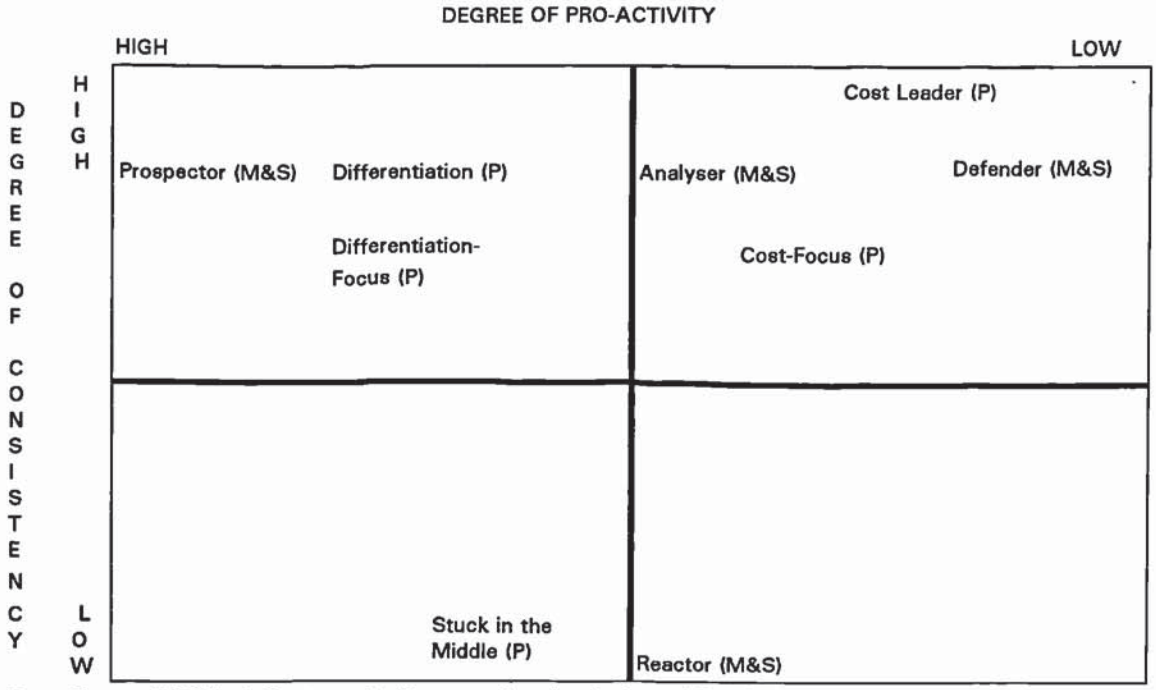
lower price, better customer service, while others will be less responsive seeking to prolong their products in the market by means of advertising and cosmetic changes. Thus Marketing Differentiators can be seen to occupy the middle ground between Innovative Differentiators and Cost Leaders.

Much research has been based on one or other of the typologies but little has been conducted which attempts to provide a mapping between them. The result is that research into strategy is fragmented and incompatible being based either on the Miles and Snow typology or on that of Porter with no coherent link between the two. In an attempt to overcome this, Segev (1989) sought to perform a comparative analysis and synthesis of the two typologies using thirty one strategic variables, evaluated on a seven point scale. Proximity analysis was then performed to indicate similarities and differences in the two typologies. The results are summarised in Figure 2.4.

The analysis indicated that Miles and Snow's Defender is closest to Porter's Cost-Focus; Prospector is closest to Differentiation; Analyser to Differentiation and Cost-Focus; and Reactor to Stuck in the Middle. From the alternative perspective, Porter's Cost-Leader is closest to Miles and Snow's Analyser and Defender; Cost-Focus to Analyser; Differentiation-Focus to both Prospector and Analyser, and Stuck in the Middle is clearly a Reactor. Segev found that the two typologies could be compared on a two dimensional space, the two axes representing the degree of pro-activity and the degree of consistency. The seven successful strategies formed a range along the axis of relative pro-activity from Prospector (high pro-activity) to Defender (low pro-activity). On the other dimension of internal consistency, the successful strategies were rated high, with Cost Leadership being the highest, and the unsuccessful strategies, Reactor and Stuck in the

Middle, low. Segev (1989) concluded that the Porter typology focuses mainly on more concentrated industries with larger business units, whereas Miles and Snow focus on industries with more competitors.

Figure 2.4: Relative Proximity of Miles and Snow, and Porter



From Segev (1989), A Systematic Comparative Analysis and Synthesis of Two Business-Level Strategic Typologies.

It can be concluded from the above research that there are links between the two typologies, although there is no direct correspondence. Segev's (1989) analysis indicates that a major factor which links them is the degree of pro-activity to the business environment, both Prospectors and Differentiators taking a relatively high pro-active stance, whereas Defenders and Cost leaders take a relatively low pro-active stance, Analysers being somewhere in the middle. Using Miller's (1986) split of Differentiators into Innovative-Differentiators and Market-Differentiators, a link can be posed between Innovative-Differentiators and Prospectors, and Market-Differentiators and Analysers.

2.3.5. Spectrum of Pro-Activity

The above review of previous research reveals a number of tentative links between the various strategic typologies. In particular, the literature suggests that a major determinant of the strategy adopted by a company is the degree of pro-activity with its particular business environment. A pro-active company is one which will seek to influence its business environment rather than being influenced by it, whereas a re-active company is one which will respond to changes in the environment. A company which seeks to be pro-active will tend to adopt an Entrepreneurial mode of strategy making (Mintzberg 1973), seek to Differentiate its products by innovation (Porter 1980), and be a Prospector (Miles and Snow 1978). At the other extreme, a company with a low degree of pro-activity (re-active) will tend to adopt a Planning mode of strategy making (Mintzberg), be a Cost Leader (Porter) and a Defender (Miles and Snow). The middle ground will tend to be taken by those companies using an Adoptive mode of strategy making (Mintzberg), which seek to Differentiate their products by marketing (Porter) and be Analysers (Miles and Snow). This suggests a spectrum of pro-activity from highly pro-active to reactive. Such a spectrum is illustrated in Figure 2.5.

Figure 2.5: Spectrum of Pro-Activity

	High	Degree of Pro-Activity	Low
Mintzberg	Entrepreneurial	Adoptive	Planning
Porter	Differentiator: innovation	Differentiator: marketing	Cost Leader
Miles and Snow	Prospector	Analyser	Defender

It should be noted that each of those categories represents the mid point of a range with a degree of overlap between them, so that for example the Entrepreneurial mode of strategy making is most compatible with Differentiation by innovation but has some compatibility with Differentiation by marketing. Similarly, Differentiation by marketing has the greatest affinity with Analysers but could also be used by Prospectors and Defenders.

It is proposed that a major determinant of a company's strategy is the degree of pro-activity it has to its environment. A company which is pro-active towards its environment is seen as one which seeks to affect change rather than responding to it. It is one which takes an active rather than passive stance to environmental change: to be ahead of the stream rather than flow with it. Product innovation is seen as a major way in which a company can promote change in its environment i.e. seeking to differentiate its products by innovation. These companies have close parallels with Miles and Snow's Prospectors and Porter's Differentiators by innovation. A company which is less pro-active towards its environment is seen as one which seeks to respond to changes in its environment rather than to promote them: to go with the stream rather than be ahead of it. Typically it will be a company which seeks to differentiate its products by marketing rather than product innovation. These companies have close parallels with Miles and Snow's Analysers and Porter's Differentiators by marketing. At the lowest end of the spectrum are companies which resist change in their environments: which seek to remain static in a moving stream. These companies will, as far as they are able, seek to minimise the effects of change. One way of achieving this is to seek out mature markets which have little product innovation and to defend against competition by cost reduction.

Another is to find niche markets. These companies have close parallels with Miles and Snow's Defenders and Porter's Cost Leaders.

2.3.6. Environmental Dynamism

A key premise in the normative literature is that a strategy should favourably align the business with its environment (Hofer & Schendel, 1978; Andrews, 1980; Porter, 1980) i.e. that strategy is an adaptation mechanism. That over time, the business develops recurring, tested guide-lines or mechanisms for responding to, or ignoring environmental shifts i.e. it gets stuck in it particular paradigm. A critical factor in this analysis appears to be the rate of change of the business environment. A relatively stable environment would appear to favour a stable organisational structure where the emphasis is on internal efficiency rather than new product development, whereas a rapidly changing environment would appear to favour a more pro-active stance with an emphasis on new product development and new market opportunities.

This idea of the dynamism of the business environment is used by Duncan (1972) and Turton (1991) to relate modes of decision making to degrees of environmental complexity and stability. Duncan (1972) distinguishes environments that are static from those that are dynamic, where dynamic means that the frequency, rate and extent of change are all high. He also categorises environments into those that are simple and those that are complex. In simple environments there are only a small number of variables that may change, while on complex environments there are many interconnected variables that may change. These two measures create four archetypal environments. The simplest archetype is the static and simple environment where the appropriate organisational system is the mechanistic one with its technically rational modes of decision making. In the most demanding of these environmental archetypes, the complex dynamic one, it is the organic organisational systems that will survive, those with flexibility, political, intuitive modes of making decisions. In between, some pragmatic combination of the mechanistic and organic is required.

This idea of market dynamism is also used in a study by McKee et al (1989) into the banking industry. They tested the proposition that the effectiveness of a particular strategic orientation is contingent upon the dynamics of the market. Using the Miles and Snow typology they found that analysers had superior performance in relatively predictable (mildly volatile) markets, but in more volatile markets the strategy-performance alignment was less clearly determined. A criticism of their research is the single measure of market volatility used: shift in the dollar volume of the market, which ignores such factors as changes in consumer tastes, degree of competition and other qualitative factors.

One question which needs to be asked, however, is how much a particular business environment is intrinsically stable and how much it depends upon the degree of pro-activity of the players in the market. A market can be relatively stable due to the lack of competition or the lack of innovation, all players being content to defend their particular niche. It is only when either one of the existing players is prepared to exploit a new technology or product, or outside competition disturbs the status quo, that the rate of change of the business environment increases.

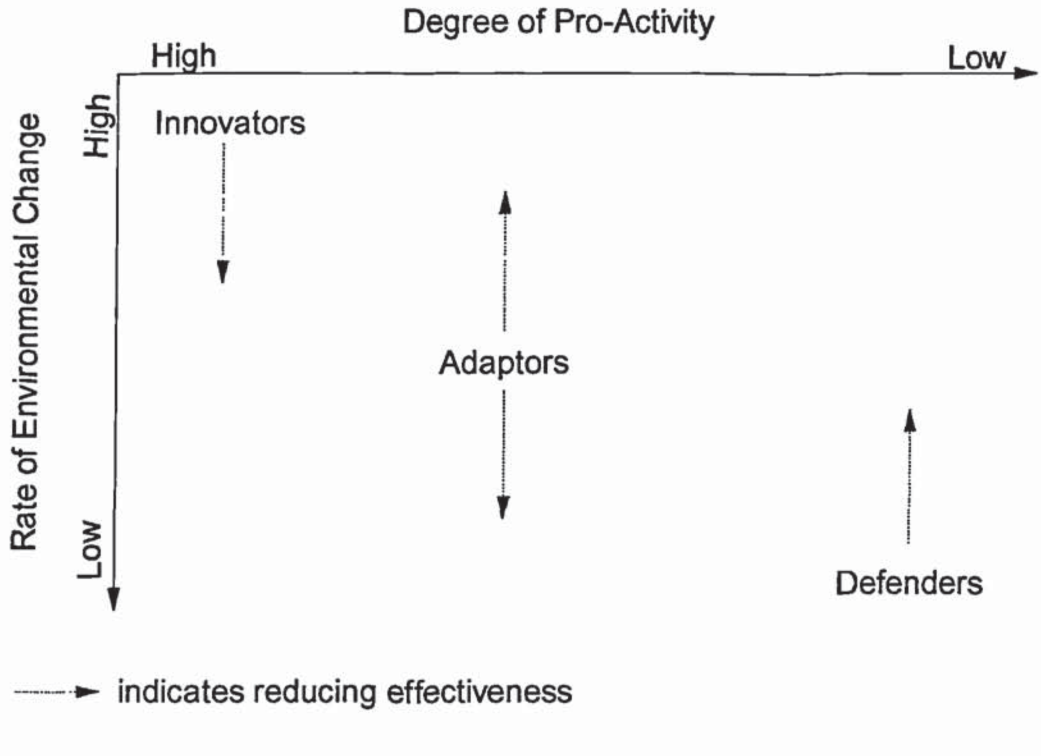
A further dimension to the proposed model is therefore that of the rate of change (dynamism) of the business environment. It is suggested that pro-active companies are better able to exploit a business environment which has a high rate of change. In fact, it may be these companies who are promoting the changes in the business environment in order to profit by their particular strategic stance. In a more stable environment they are less profitable than less pro-active companies (Hambrick 1983a), their degree of success reducing as the rate of change of the business environment decreases, or their ability to influence that rate of change reduces. Re-active companies, on the other hand, are most successful in a slowly changing business environment with relatively stable products and markets. As the rate of change of the environment increases they become less successful. Other companies occupy the middle ground, responding to changes in the environment rather than seeking to be a significant promoter of that change. They are able to succeed best in the middle ground where pro-active and re-active are less successful. They perform better than pro-active companies because the rate of environmental change is less than the relatively high rates which they require and better than re-active companies because the rate of environmental change is more than the relatively low rates which they require.

In a rapidly changing environment, a company must be highly pro-active in order to be successful and must adopt control systems which support this pro-activity by being externally focused. On the other hand, in a relatively slowly changing environment a company can be much less pro-active and can adopt control systems which are more internally focused. Indeed, such a focus will lead to greater efficiency and productivity and will promote the success of the company.

2.3.8. Strategic Typologies: Summary and Proposed Synthesis

This section has reviewed the literature on strategic typologies, in particular that of Mintzberg (1973), Miles and Snow (1978), Porter (1980,1985), and the work of Zahra and Pearce (1990), Shortell and Zajac (1990), Speed (1992) which has attempted to provide some validity for the various typologies. The work of Hambrick (1983a), Miller (1986), and Segev (1987, 1989) has been used to provide a comparison and synthesis of the typologies of Mintzberg, Miles and Snow, and Porter and to provide pointers towards common dimensions upon which the different typologies can be related. It is proposed that the dimensions of Business Pro-Activity and Environmental Change provide a plausible explanation of why companies need to adopt different strategies to be successful in different markets. The model illustrated in Figure 2.6 is proposed as a synthesis of this research.

Figure 2.6 Proposed Model of Strategic Types



Innovators are particular types of Porter's Differentiators which Differentiate by means of product innovation. They correspond to Miles and Snow's Prospectors and will tend to be those companies which use an Entrepreneurial mode of strategy making. Adaptors are a particular type of Differentiator, but this time by means of marketing. They have some correspondence to Miles and Snow's Analysers and will tend to be those companies which use an Adoptive mode of strategy making. The Defenders are those which seek to defend their current position, often by being the lowest cost producers in their market. They are congruent with Miles and Snow's Defenders and will tend to be those which use a Planning mode of strategy making.

Combining the key features from Tables 2.3 and 2.4, Table 2.7 shows the key features of the synthesized typology. Innovators are better able to exploit a business environment which has a high rate of change. In fact, it may be the Innovators who are promoting the changes in the business environment in order to profit by their particular strategic stance. In a more stable environment they are less profitable, their degree of success reducing as the rate of change of the business environment decreases, or as their ability to influence the rate of change reduces. Defenders, on the other hand, are most successful in a slowly changing business environment with relatively stable products and markets. As the rate of change of the environment increases they become less successful. Adaptors occupy the middle ground, responding to changes in the environment rather than seeking to be a significant promoter of that change. They are able to succeed best in the middle ground where the Innovators are less successful due to the rate of environmental change being less than the relatively high rates which they require, and the Defenders due to the rate of environmental change being more than the relatively low rates which they require.

Table 2.7 Strategic Type Characteristics: Pro-Activity/Environmental Change

		Strategic Types		
		Innovators	Adaptors	Defenders
Entrepreneurial	Product- market domain	Broad and continuously expanding	Segmented and carefully adjusted.	Core markets. Careful focus.
	Success posture	Creative flair. Active innovator of change. Reputation for technological leadership. Perceived uniqueness of product.	Strong marketing abilities. Calculated followers of change. Reputation for quality.	Lowest cost producer, low cost distribution system, high relative market share.
	Surveillance	Market and environment. Active search for new products and markets.	Market and competitors. Active analysis of competitor's products.	Domain dominated. Strong organisational monitoring.
	Growth	Innovative products. Initiating product/market development and diversification. Organic rather than by acquisition.	Assertive penetration and careful product market development. Organic and by acquisition.	Productivity improvements. Cautious penetrating. Acquisition rather than organically.
Engineering	Technological goal	Technologically innovative products. Flexible manufacturing.	Technologically advanced products.	Product design for ease of manufacture. Cost efficiency
	Technological breadth	Strong capabilities in basic research. Highly pro-active. Multiple technologies. Product engineering/ manufacturing flexibility.	Some research capabilities. Followers not leaders. Product engineering/ manufacturing flexibility.	Focus on core technology and basic expertise.
	Technological buffers	Highly skilled labour, scientists, and creative people.	Incremental change. Integration of technologies.	Process engineering skills. Standardisation.

Table 2.7 Strategic Type Characteristics: Pro-Activity/Environmental Change

		Strategic Types		
		Innovators	Adaptors	Defenders
Administrative	Dominant coalition	R&D, product development, marketing.	Marketing, product development, planning.	Finance and production
	Strategy making mode	Entrepreneurial: opportunity seeking, bold decisions, growth oriented, high uncertainty.	Adoptive: reactive, incremental goal setting, relative certainty in decision making.	Planning: analysis dominates decisions, integrated strategies.
	Planning	Strategic, flexible, program orientated.	Strategic, comprehensive with incremental changes.	Financial control dominated. Substantial capital investment.
	Structure	Product and/or market centred. Strong integrating/ coordinating mechanisms. Decentralised.	Staff dominated. Strong integrating/ coordinating mechanisms. Balance between centralised and decentralised.	Functional/line organisation with defined responsibilities. Centralised.
	Control	Subjective measurement and incentives. Qualitative rather than quantitative. Market orientated.	Qualitative and quantitative. Focus on market and product profitability.	Centralised and formal. Tight cost control. Frequent, detailed control reports, quantitative targets. Incentives based on meeting strict quantitative targets.

Companies which wish to remain in a particular market, where the rate of environmental change has altered from that most suited to their strategy, have a number of options. They can seek to change their strategy to one which better fits the environment e.g. if the rate of environmental change has increased, they can change from their present position as Adaptors to one of Innovators. Alternatively, they can seek to find a niche market where the conditions are more suited to their strategic stance e.g. becoming Defenders when the degree of competition increases, by seeking a larger share of a particular market segment e.g. high quality, exclusive sports cars, rather than competing in the mass production market. Such a strategy has a close correspondence with Porter's Focus strategic type. It is the application of one of the generic strategies in a focused way in a particular market segment. It is an attempt by the company to find a sub-environment whose rate of environmental change matches the company's degree of pro-activity.

The proposed model has as its underlying thesis that a company will be most successful in its business environment when its rate of pro-activity towards that environment is in accord with the rate of change of that environment. It is based upon the idea of the adaptive cycle proposed by Miles and Snow (1978) by which a company aligns its strategy with the environment and overcomes the three sets of problems: entrepreneurial, engineering and administrative. Such a theory of co-alignment uses the concept of strategic choice (Child 1972): that major decisions made by management serve to define the organisation's relationship with that environment, rather than being purely a reaction of the company to that environment i.e. that a company can be both pro-active and re-active towards its environment. It also draws upon the ideas of Porter (1980,1985) who sees a company attempting to take a defensible position against the five competitive forces within an industry by taking either an offensive or defensive position: re-active, pro-active, awareness. In contrast to Miles and Snow, however, the proposed model sees strategy as an adaptive mechanism rather than being relatively immutable, and suggests that a company can change its degree of pro-activity to the market and, in fact, must make such changes when the rate of change of the environment is itself varying.

Research conducted by Ansoff and Sullivan (1993) is highly supportive of the above proposition. In it they suggest that for optimum profitability the level of both the strategic aggressiveness and general management responsiveness of the firm must be aligned with the level of environmental turbulence. Strategic aggressiveness ranges from stable to creative, general management responsiveness from stability seeking to environment creating, and the environmental turbulence from repetitive to surpriseful. These dimensions have a close correspondence with the proposed model. Of particular interest to the current study is their alignment of a number of factors which contribute towards the degree of pro-activity of a company, termed optimum general management capability profiles. In particular the contribution of culture and management systems should be noted. These are summarised in Table 2.8.

Table 2.8 Matching turbulence, aggressiveness and responsiveness

LEVEL	1	2	3	4	5
ENVIRONMENTAL TURBULENCE	REPETITIVE No change	EXPANDING Slow incremental change	CHANGING Fast incremental change	DISCONTINUOUS Discontinuous predictable change	SURPRISEFUL Discontinuous unpredictable change
STRATEGIC AGGRESSIVENESS	STABLE Stable based on precedents	REACTIVE Incremental change based on experience	ANTICIPATORY Incremental change based on extrapolation	ENTREPRENEURIAL Discontinuous new strategies based on observable opportunities	CREATIVE Discontinuous novel strategies based on creativity
RESPONSIVENESS OF GENERAL MANAGEMENT CAPABILITY	STABILITY SEEKING Rejects change	EFFICIENCY DRIVEN Adapts to change	MARKET DRIVEN Seeks familiar change	ENVIRONMENT DRIVEN Seeks related change	ENVIRONMENT CREATING Seeks novel change
CULTURE	Stability seeking	Efficiency seeking	Growth seeking	Opportunity seeking	Opportunity creating
KEY MANAGEMENT SYSTEMS	Policies Procedures	Financial control Budgeting	Extrapolative strategic planning	Entrepreneurial strategic planning Strong signal Issue management	Entrepreneurial strategic planning Weak signal Issue management Surprise management

Adapted from Optimizing Profitability in Turbulent Environments: A Formula for Strategic Success, Ansoff and Sullivan (1993)

The success of any strategy relies on the effective control of the company's resources in the pursuance of that strategy. Table 2.7 shows how each of the strategies requires a different resource focus in the entrepreneurial, engineering and administrative areas. These proposed attributes have drawn mainly on the strategy literature. There is also a wealth of literature in the specific areas of strategy and structure, strategy and planning, and strategy and control. In order to better understand this link between strategy and the control systems used by companies, the following sections provide a review of the relevant literature.

2.4. Strategy and Organisational Structure

One of the most important ways in which a company can assist the formation, implementation and control of its strategy is by adopting an appropriate organisational structure. As the strategies of companies evolve and become more complex, it is increasingly difficult to know which type of organisational structure will facilitate their formation and implementation but as Egelhoff (1988) comments, it is increasingly important for a company's management to understand strategy-structure relationships and anticipate changes in order to minimize periods of misfit. Organisations which fail to structure properly in order to support the implementation of their strategies, or to fit the environmental conditions implied by these strategies may well find themselves at a relative disadvantage in exploiting their environments (Egelhoff, 1982). It is important that each element makes sense in terms of the whole, and that together they form a cohesive system. Such cohesive systems reduce the number of possible ways in which the elements combine, and make it more likely that common configurations will account for a large proportion of organisations. It also follows that such relatively stable systems will be difficult to change. A change in strategy will involve, amongst other things, a change in organisational structure, otherwise the strategy will be inconsistent with the structure. Such changes will be expensive and disruptive and will only be undertaken infrequently. Govindarajan (1986) suggests that a company's strategy will change over time, with the result that a mismatch will occur between the current organisational structure and the new strategy. This, he suggests, may either prevent or dramatically hinder the managers from implementing the new strategy. Work by Grinyer et al (1980) also suggests that a match between strategy and structure is forced upon an organisation by hostile environmental pressure and that an appropriate match facilitates coping. Recent empirical research by Hamilton and Shergill (1992) into companies listed on the

New Zealand Stock Exchange found "that there is indeed considerable substance to the central notion that the congruence of strategy and structure in influential in terms of company financial performance."

The first empirical work which sought to link strategy and structure was that of Chandler (1962). In his study of 70 large US corporations he found that a new strategy required a new or at least refashioned structure if the enlarged enterprise was to be operated efficiently. He argued that as these firms accumulated resources so they moved into new product areas. This gave rise to new administrative problems, which were eventually solved through the implementation of new structures. Growth through vertical integration led to functional structures and a company's subsequent diversification to the multi-divisional form. Further studies by Wrigley (1970), Galbraith & Nathanson (1979), Rumelt (1974), and Channon (1973) showed that certain strategies need to be supported by certain structures. Studies by Child (1973), and Grinyer et al (1981) sought to link strategy, structure and size. A number of empirical studies have also attempted to describe the relationship between strategy and structure for Multi-National Companies: Fouraker and Stopford (1968), Brooke and Remmers (1970), Stopford and Wells (1972), Pitts (1976), Franko (1976), and Daniels et al (1984, 1985). Studies by Dyas and Thanheiser (1976) and Suzuki (1980) indicate differences across countries with less use of the multidivisional form outside the U.S., but in general they support the proposition that increased diversification is associated with increased incidence of the multidivisional form, particularly under competitive conditions.

2.4.1. Links between Strategic Typologies and Organisational Structure

Miller (1986) comments that the above were important studies, yet they merely scratched the surface. Strategy has been characterised mainly in terms of breadth of market: diversified verses undiversified. Structure has been largely viewed according to its divisionalised and departmentalised form and the nature of its control systems. The work of Miles and Snow (1978) represents an attempt to look at strategy and structure from a more multi-dimensional point of view. Miles and Snow's description of the administrative structures and procedures employed by businesses pursuing different types of strategy suggests that the degree of formalisation should vary by generic strategy. Burgelman (1983a) comments that whereas order in strategy can be achieved through planning and structuring, diversity in strategy depends on experimentation and selection. The current structure reflects the company's past and present strategies but may inhibit corporate entrepreneurship in relation to future strategies. Miles and Snow (1978) describe the primary administrative problem for Prospectors as the development of organisational structures which will enable them to adapt quickly to changes in complex and unstable environments. Because reliance on rigid rules and procedures, or high degrees of formalisation would limit their ability to deal effectively with complex and changing conditions, Prospectors are more likely to rely on organic forms of organisation where formalised rules and procedures are replaced by informal and interpersonal modes of interaction. Prospectors will therefore tend to adopt a product and/or market focused decentralised structure. In contrast, Defenders commonly operate in more stable environments, and have as their administrative problem the quest of efficient operations. In order to increase their efficiency they tend to develop more mechanistic or formalised structures and rely heavily on explicit rules and standard operating procedures for coordinating activities. Defenders will therefore tend to adopt a centralised functional/line authority structure. Analysers form an intermediate organisational type. In the core business, a formalised structure should dominate. However, in the search for opportunities in new market areas more loosely structured arrangements are expected. The spectrum is therefore seen to be from decentralised "organic" for the Prospectors through to centralised "mechanistic" for the Defenders, with the Analysers somewhere in between. Relating this to the previously hypothesized Spectrum of Pro-activity, this would suggest that a highly pro-active company will adopt a product/market focused decentralised organisation structure whereas a company with a relatively low degree of pro-activity will adopt a centralised function/line structure, with companies falling between these two adopting a mixed structure. A problem with using this hypothesis of Miles and Snow's linking strategy and structure is that it has had no empirical verification (see Table 2.5), Zahra and Pearce (1990) commenting that the typology's predictions concerning the appropriate structures and administrative philosophies have not been explored to date, even though the literature has emphasised the control importance of the fit between strategy and structure as a condition for effective performance.

In support of a link between strategy, structure and environmental dynamism, Govindarajan (1986) argues that decentralisation is likely to contribute to the effectiveness of companies facing high environmental uncertainty, whereas centralisation is likely to contribute to the effectiveness of companies facing low environmental uncertainty. Similarly, routine, mass production technologies (Defenders, Cost Leaders) are likely to be more effective within companies with centralised decision making, as opposed to non-routine, job shop technologies (Prospectors, Differentiators) which are likely to be more effective in companies with more decentralised decision making.

Centralisation is also likely to contribute to the effectiveness of companies which have high interdependence between their divisions. The competitive advantage gained by the scale benefits of high resource sharing is likely to be more critical for companies pursuing a low cost rather than differentiation strategy. This is again supportive of the proposed model which links environmental uncertainty (the rate of environmental change) with the organisational structure: a company in a relatively stable environment adopting a centralised structure; a company in a dynamic environment adopting a decentralised structure. This link between environmental uncertainty and structure is supported by the work of Lawrence and Lorsch (1967) who showed that high performing firms in an uncertain environment had greater decentralisation than low performers and that in the predictable industry the high performer was the more centralised i.e. the higher performer in both industries had achieved a fit with their environment.

Miller (1986) commenting on the link between the strategic typology proposed by Porter (1980) and structure, suggests that strategies of differentiation through innovation would not be easy to implement within a bureaucratic or mechanistic structure (Burns and Stalker, 1961). He comments that it also seems incongruous that bureaucratic structures could give rise to differentiation through innovation. By the same token, he suggests that organisations that have embraced a cost leadership strategy might require bureaucratic, mechanistic structures that place a great deal of emphasis on sophisticated cost controls; standard, repetitive procedures; and cost information systems. Organic structures would be too flexible and inefficient to appropriately serve cost leaders. He argues that there are ties that unite strategy and structure; that given a particular strategy there are only a limited number of suitable structures and visa versa. A reason given for the existence of such configurations is that organisations may be driven towards a common configuration to achieve internal harmony among its elements in order to meet the threats and challenges of its business environment. For example, a stable environment would enable the operating procedures of a company to be made routine and formal. Such routine and formal procedures would, in their turn, tend to lead the company to seek out a stable environment. Hence Cost Leadership strategies (Porter, 1980) would come to be favoured. Large size could lead to inflexibility which could then prompt the search for stability in the environment and hence to a Defender strategy (Miles and Snow, 1978). Table 2.9 gives Miller's suggested links between the generic strategies of Miles and Snow (1978) and Porter (1980), and the structural types of Mintzberg (1979).

Table 2.9 Possible Links between Strategy and Structure, Miller 1986

Structure Types	Strategy
Simple	Focus Differentiation
Machine Bureaucracy	Cost Leadership
Organic	Innovative Differentiation
Divisionalised	Marketing Differentiation or Cost Leadership

This is in accord with the work of Duncan (1972) who suggests that the appropriate organisational system for a static simple environment is a mechanistic one and for a complex dynamic environment an organic one. The spectrum here is from Machine Bureaucracy for stable environments through to Organic for environments experiencing a high rate of change, with Simple or Divisionalised structures being used by companies which operate in the middle ground. Such a link between the rate of change of the environment, the strategy and the organisation structure adopted by a company provides support for the proposed model which views these elements as part of an interactive system.

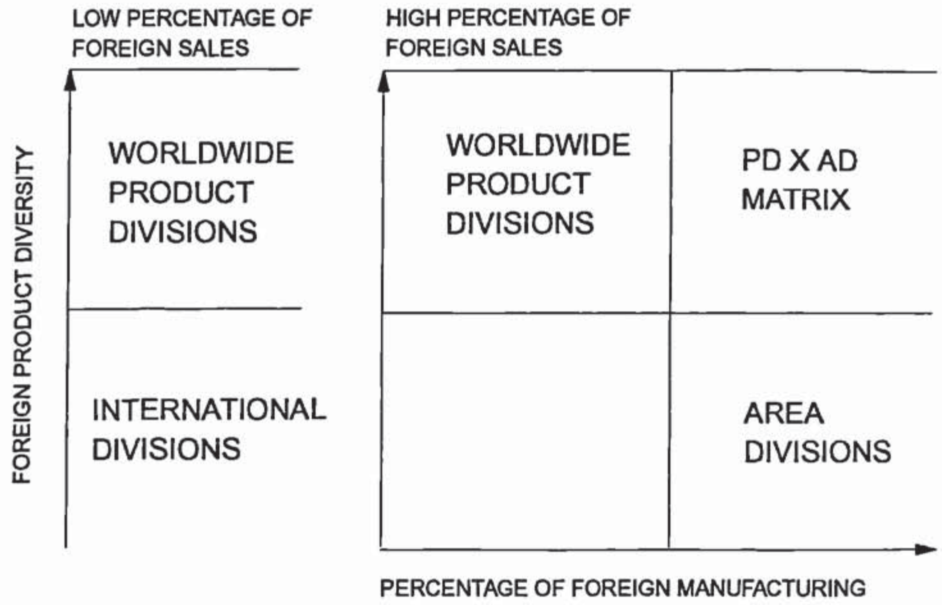
2.4.2. Structural Types: International Dimensions

The above studies, whilst providing some evidence for the link between strategy and structure, use only the dimensions of centralised to decentralised, formal to informal, organic to bureaucratic. Such classifications do not consider the type of structure e.g. divisional, area, product. Stopford and Wells (1972) in a large and comprehensive analysis of 187 large US Multi-National Company's developed the most explicit theory linking strategy and structure in Multi-National Company's. The Stopford and Wells Model uses as its main dimensions foreign product diversity and percentage foreign sales. They found that when foreign product diversity and percentage foreign sales were relatively low Multi-National Company's tended to adopt an international divisional structure. As foreign product diversity increased, companies in the sample tended to use product division structures. Similarly, companies pursuing strategies leading to a relatively high percentage of foreign sales tended to use area division structures. When a company's strategy contained both high foreign product diversity and high percentage foreign sales, Stopford and Wells hypothesized that Multi-National Companies would tend to employ matrix and mixed structures, although their data provided only weak support for this.

In a study of 24 US and 26 European Multi-National Companies Egelhoff (1988) sought to test the Stopford and Wells hypothesis. Egelhoff found strong evidence to support the hypothesis that Multi-National Companies with world-wide product division structures tend to have more foreign product diversity than firms with either international division or area division structures, but weaker evidence that Multi-National Companies with area division structures tend to have a greater percentage of foreign sales than firms with either international division or product division structures. There was also weak evidence to support their hypothesis that Multi-National Companies with matrix structures tend to have relatively high levels of both foreign product diversity and foreign sales. The data also indicted that it was impossible to generalise about the level of foreign product diversity and foreign sales and their link with mixed structures. Egelhoff (1988) also found that area division structures tended to be associated with significantly higher levels of foreign manufacturing than Multi-National Companies with world-wide products division structures. He argues that such strategies create high interdependencies between foreign subsidiaries within a region and reduced interdependencies between foreign subsidiaries and the parent's domestic operations. In contradiction to the Stopford and Wells (1972) model, Egelhoff (1988) found that both area division and product division structures fit strategies which involve relatively high percentages of foreign sales. When Multi-National Companies support foreign sales with exports from the parent, the primary interdependency is between a foreign subsidiary and the parent's domestic operations. The world-wide product division structure provides the kind of information processing and integration required to co-ordinate this kind of interdependency. When the strategy is to support foreign sales with extensive foreign manufacturing, important interdependencies usually develop between foreign subsidiaries within a region or area, as the company now attempts to realise area economies of scale to replace the economies of scale which were formally provided by centralised production,. The area division structure provides the kind of information processing and integration required to co-ordinate this kind of interdependency (Egelhoff, 1988).

Egelhoff (1988) proposed a revision of the Stopford and Wells (1972) model which incorporates the dimension of percentage foreign manufacturing (Figure 2.7).

Figure 2.7 Revision of Stopford and Wells, Egelhoff (1988)



International strategies which involve a relatively low percentage of foreign sales and low foreign product diversity tend to fit the international division structure, which facilitates responsiveness to national interests. When international strategies involve relatively high percentages of foreign sales, supporting structures tend to be those which provide higher levels of co-ordination and information processing between foreign subsidiaries and other sectors of the company. When the percentage of foreign manufacturing is relatively low, the world-wide products division structure provides the necessary information processing ability. As the percentage of foreign manufacturing increases, the relative interdependence of foreign subsidiaries also increases. If the foreign product diversity is relatively low, the area divisional structure provides the degree of information processing required to enable the company to be responsive to regional and national interests. When the degree of foreign product diversity is relatively high, a matrix structure with dimensions of product and area is required to give the necessary degree of co-ordination.

In relation to the current study, it is not at first clear how such a linking of strategy and structure fits into the proposed model. A company with a relatively low degree of pro-activity to the environment will tend to have low foreign product diversity and a relatively low percentage of foreign sales, and will, according to Egelhoff (1988), tend to use an international division structure for foreign sales. As the degree of pro-activity increases in response to a changing environment, the degree of product diversity will tend to increase. This may only be in the home market initially, so the international division structure will be retained. As the company attempts to be more pro-active in foreign markets, the degree of product diversity will increase thus resulting in a need to modify the organisational structure to better cope with the information processing requirements of the new environment. According to Egelhoff (1988), the company will move towards a world-wide product division or matrix structure, depending upon the degree of foreign manufacturing. Alternatively, if the business environment is relatively stable, the company may decide to sell its core products in foreign markets, in which case an area division structure may be more appropriate. This has some consistency with the proposed model, where a company with a low degree of pro-activity (Defenders) will tend to adopt a functional/line organisational structure, international divisions fitting into this category, whereas a more pro-active company (Adaptors and Innovators) would tend to adopt a product and/or market structure, world-wide product divisions and matrix structures fitting into this category. The area division structure, however, is proposed by Egelhoff for companies with low product diversity, whereas the proposed model suggests that such a structure would be used by companies which were more pro-active and therefore have more product diversity (Innovators and Adaptors).

In contrast to Egelhoff (1988), Hout, Porter and Rudden (1982) expressed the view that global strategies require new, more centralised forms of structure, that can integrate managerial decision making across many markets that were previously dealt with in a decentralised manner. One possible explanation of the above is that proposed by Galbraith (1969, 1973,1977) and Galbraith and Nathanson (1979). Galbraith views organisations as having a good structural fit when the information processing capacities of the structure fits the information processing requirements of its environment and technology. Egelhoff (1982) similarly views each of the organisational structures available to an organisation as facilitating certain types of information processing between sub-units of the organisation, while at the same time restricting other types of information processing. He suggests that there is a good fit between structure and strategy when the information processing requirements of a firm's strategy are satisfied by the information processing capacities of its structure. A company which has low pro-activity towards its business environment and which focuses internally on cost reduction will tend to adopt a functional/line organisational structure. Its focus on core products will mean that a product division structure is not required as there is insufficient product diversity. The desire for efficiency of manufacturing and distribution may, however, lead the company to increase its foreign manufacturing. The international division structure may then prove inefficient and an area division structure be adopted, not in order to be closer to market information, but to make it easier to retain tight control of the costs of the manufacturing plant. In contrast, the more pro-active companies will adopt an area division structure in order to promote the flow of local market information. It is more likely, however, that a more pro-active company with greater product diversity will adopt a product division or matrix structure in order to promote the flow of product information. This will possibly depend upon the degree of globalisation of the products e.g. how specific they are to particular markets.

2.4.3. Strategy and Structure: Conclusions

The literature on strategy and structure suggests strong links between the strategy which a company adopts and its organisational structure but weaker evidence for the specific type of structure adopted. A particular structure should be seen as not only assisting the company in the implementation of its strategy, but also as effecting the formation of the strategy. The particular organisational structures which a company has adopted will assist the flow of certain information and inhibit the flow of other, e.g. a product structure will assist the flow of product information but will inhibit the flow of geographic information relating to markets. This will tend to assist the company in its ability to respond to changes in its products but not to changes in local markets. Using the previously hypothesized Spectrum of Proactivity/ Rate of Environmental Change model, companies which operate in relatively stable environments, and which have a strategy of low pro-activity to that environment (Defenders), are likely to seek out a structure which promotes administrative efficiency: mechanistic, formalised, explicit rules and standard procedures, high resource sharing. A centralised functional/line authority structure i.e. a bureaucracy (Mintzberg, 1979) fits these requirements and will tend to be adopted. For foreign operations, the company is likely to adopt an *international division structure* where the degree of foreign manufacturing is low, and an area division structure when the degree of foreign manufacturing increases such that this structure is inefficient (Egelhoff, 1988). This type of company will tend to use foreign manufacturing in order to reduce the costs of manufacture and distribution rather than to be more responsive to local needs. A product division structure is not used as the degree of foreign product diversity is low and therefore the processing of product information is not critical. The area division structure is used in order to promote the flow of costing information from the areas to the centre. This centralised form of structure will inhibit the flow of strategic ideas from the bottom to the top of the organisation and will therefore inhibit the emergence of strategy. Strategy will therefore tend to be imposed from the top.

In contrast, companies which operate in relatively unstable environments which seek to be pro-active (Innovators) will tend to seek out structures which allow flexibility and promote change: organic, informal, interpersonal interactions stressed. A decentralised product/market focused structure fits these requirements and will tend to be adopted. Such companies will tend to have a high degree of foreign product diversity and therefore for foreign operations a product/market or matrix structure is likely to be adopted, the latter if the degree of foreign manufacturing is relatively high. Such a structure will promote the flow of product information and help the company to be responsive to local market needs. This decentralised structure will also promote the development and communication of strategy from the bottom of the organisation to the top i.e. it promotes emergent strategy rather than imposed strategy.

Companies which operate in less active markets than the Innovators and which seek to be less pro-active (Adaptors), need to balance the requirement for administrative efficiency with the need for flexibility. Such companies will tend to adopt a mixed form of structure which allows tight control from the centre to the divisions but which allows flexibility within the divisions. A matrix form of structure could also be adopted. For foreign operations, the company will tend towards the international division structure where the degree of foreign product diversity is low, this fitting into the overall divisional structure. As the degree of foreign product diversity increases the information processing requirements will put pressure on the overall company to change to either a product division structure or some form of matrix structure. This is likely to be resisted as long as possible due to the disruption caused and the higher cost of servicing such a structure. This mixed form of structure will assist the flow of strategic information from the bottom to the divisions but will inhibit the flow of information from the divisions to the top. It will therefore promote emergent strategy within the divisions but will tend to inhibit the emergence of strategy at the top of the organisation i.e. it will tend to be imposed.

It can thus be seen that the literature relating to organisational structure is supportive of the previous proposition (Table 2.7) regarding overall structure and provides an extension to incorporate foreign operations. Table 2.10 shows an extension of the relevant parts of Table 2.7 which incorporate the international dimension not previously considered (shown in bold type).

The information processing ability of each type of structure means that a balance has to be struck between operational efficiency and responsiveness to the environment. An efficient structure in terms of operational efficiency may not be efficient in terms of its information processing ability and may thus inhibit the strategy formation process.

Table 2.10 Strategic Type Characteristics: Structure

Strategic Types		
Innovators	Adaptors	Defenders
Product and/or Market focused. Strong integrating/ coordinating mechanisms. Decentralised. "organic" **Foreign Operations: Product/Market, or Matrix (higher foreign manufacturing)**	Staff dominated. Strong integrating/ coordinating mechanisms. Balance between centralised and decentralised. Possible Matrix structure. **Foreign Operations: International Division (low foreign product diversity), Product Division or Matrix (higher foreign product diversity)**	Functional/Line organisation with defined responsibilities. Centralised. "mechanistic" **Foreign Operations: International Division structure (low foreign sales), or Area Division structure (higher foreign manufacturing)**

Recent research by Slevin and Covin (1990) provides confirmatory evidence for the link between organisational structure (organic versus mechanistic), environmental dynamism (hostile versus benign) and management pro-activity (entrepreneurial versus conservative). They found that organic structures worked best for entrepreneurial firms operating in hostile environments because they enhanced communication and minimised bureaucratic barriers to innovation, permitting rapid responses to market and industry demands. On the other hand, mechanistic structures worked best for conservative firms as they provided order and predictability and accomplished routine and repetitive tasks with maximum efficiency. They found that hostile environments elicited entrepreneurial behaviour with firms responding by aggressively trying to gain and maintain a competitive advantage. In more benign environments, entrepreneurial action could often constitute an unnecessary risk.

The organisational structure delineates how we look at the business environment and make sense of it. Piercy (1991) suggests that when considering strategic change the organisational structure is not where to start but rather a company needs to develop an appropriate information and planning system first. Although the planning process will be assisted or hindered by the particular organisational structure adopted by the company, a change in the structure does not promote change but merely enables it to happen. In the next section the literature relating to strategic planning is therefore considered in order to find supporting evidence for the hypothesized relationships between strategy and strategic planning (Table 2.7).

2.5. Strategic Planning

Previous sections have examined the various alternative strategies and theories of strategy formation and how, in particular, the organisational structure can assist in this process. The formal planning system is another means by which the development and implementation of strategy is facilitated. Formal long-range planning is seen as a management tool which might provide competitive advantage to those companies which adopt it (Lorange, 1979) and a form of organisational learning and adoption which enables change (Piercy, 1991). The following section discusses the various definitions of strategic planning, its scope and purpose, before looking at the various determinants of the strategic planning system.

2.5.1. Definitions of Strategic Planning

One possible definition of strategic planning is that given by Taylor and Irving (1971):

1 The formal process of developing objectives for the corporation and its component parts, evolving alternative strategies to achieve these objectives and doing this against a background of a systematic appraisal of internal strengths and external environmental changes.

2 The process of translating strategy into detailed operating plans and seeing that these plans are carried out.

Thus strategic planning is seen as the process of strategy formation, evaluation and implementation. In support of this, Quinn (1979) recommends that the planning-budgeting process should be converted from its primary role of resource rationing to one in which opportunity seeking becomes important too. He sees the planning process as one which produces an array of entrepreneurial possibilities which remain consistent with the current strategy or, at the limit, with changes in strategy already envisaged by top management. Piercy (1991) goes further, seeing planning as "mould breaking", changing the company's view of the business environment, creating meaning and a new reality. Since planning often challenges existing corporate values and attempts to introduce new ones, the process needs to be seen as a political one (Leppard and McDonald, 1991).

Keppler et al (1979) in a survey of 200 West German Companies found that in practice, long-range planning should mainly be understood as a means for top management to realise its objectives and strategies. Long-range planning is therefore described as a tool of planned change. It is seen as an integrative function in that the objectives, strategies and policies described in long -range plans form a common basis of action for members of the company.

Armstrong (1982) comments that formal strategic planning calls for: an explicit process for determining the firm's long range objectives, procedures for generating and evaluating alternative strategies, and a system for monitoring the results of the plan when implemented. Horovitz (1979), in a survey of the planning practices of 52 large firms in the U.K., France and West Germany, found that virtually none had an explicit procedure for monitoring the results of their long-range plans. Typically, they relied on short range budget controls.

2.5.2. Determinants of the Strategic Planning System

Grinyer et al (1986) suggest four separate but related roles for the corporate planning process which may be expected to bear upon its design. First, it is seen as a proactive or, at least, a rapidly reactive mechanism which permits the company to respond to the threats and opportunities presented by the changing environment (Gilmore and Brandenburg, 1962; Ansoff, 1965, 1969; Ackoff, 1970; Grinyer, 1971; Malm, 1975). Secondly, planning in general may be a means of reducing uncertainty (Bright, 1958) and in particular protecting the organisation's core technology (Thompson, 1967). Thirdly, the corporate planning process may not only organise action programmes to implement strategic decisions but may also be regarded as an integrative device (Lawrence and Lorsch, 1967; Athreya, 1970). Fourthly, the process may provide the basis for control of lower organisational units, particularly within a divisional structure (Berg, 1973; Channon, 1973; Lorange and Vancil, 1977; Lorange, 1979).

Using the proposed model of strategic types and the above suggested roles for the strategic planning system, it is submitted for consideration that strategic planning is most likely to be used by Innovators and Adaptors. That Innovators use strategic planning to enable then to respond to the threats and opportunities which they face in their rapidly changing environments and that if a decentralised organisation is adopted, strategic planning provides an integrative mechanism to co-ordinate the disparate parts of the business. That Adaptors use strategic planning to reduce uncertainty and protect their organisations' core technology, whilst responding to changes in the environment and that if a divisional structure is adopted, the process provides one mechanism for controlling the lower organisational units. That Defenders are unlikely to place great emphasis upon strategic planning as their environment is relatively stable, and they achieve co-ordination through a centralised organisational structure. Further evidence will be sought for this proposition from the literature.

According to Miles and Snow (1978), planning by Prospectors will be outward looking and tentative rather than focused on detailed action. The focus will be on products and markets rather than on functions. Initiative will flow bottom-up from product-market groups, and planning will be used to promote the identification and exploitation of product-market opportunities. Co-ordination will take place through informal contacts as activities unfold and performance monitoring may be used to identify any necessary revisions to the plan. Thus strategies are likely to be emergent rather than imposed. On the other hand, planning in Defenders will be relatively detailed, orientated towards functions and focused inwards. Initiatives will flow top-down and planning will be used to secure continual efficiency improvements. Performance monitoring systems may be used to secure conformance to planned activities. Thus strategy will tend to be imposed rather than emergent. In support of the above, Lorange (1979) found that the strategic posture of the firm was one of the determinants of the degree and nature of the strategic planning undertaken by a company. The strategy affected whether the planning was top-down or bottom-up and the relative emphasis on long-term objective setting versus shorter term action programmes.

Using the Miles and Snow (1978) strategic typology of Defenders, Prospectors and Analysers, Simons (1987) sought to investigate from an accounting perspective which specific attributes of control system design differ with a firm's strategy. He found that Prospectors devoted considerable attention to developing strategic plans from the bottom-up to satisfy a stated need for environmental information. In contrast, Defenders often alluded to a planning cycle dependent on the downward communication of goals set by top management or to a lack of long term planning. Thus in terms of the proposed typology, Innovators in their desire to be pro-active will use the strategic planning system to promote the flow of information, from the bottom up, about the rapidly changing environment. Defenders, on the other hand, will use the system to communicate, from the top down, the goals of the top management. Adaptors will seek a compromise solution, using the system in both a top-down and bottom-up style, the centre setting overall objectives for the divisions, and the divisions adopting a bottom up method for their subsidiaries. Thus, the requirements of the strategic planning system are not exclusively due to environmental conditions, with the company in a passive role, but are also due to the company's strategic choices (Child, 1972) i.e. upon the extent to which company choses to be pro-active towards its environment. In support of this Keppler et al (1979) argue that the planning system is influenced by the extent to which it is required to find new objectives and strategies or whether it is merely required to slightly modify existing goals, strategies and polices i.e. it expresses the company's inclination to welcome innovation. Leppard and McDonald (1991) found that the degree of acceptance of a marketing planning system was directly related to the values and culture of the organisation and that an organisation is unlikely to change its values system or culture unless something very significant takes place to make such a change seem worthwhile. The planning system may therefore need to be modified to suit the corporate culture.

Lorange (1979) proposed that, in order to be effective, a firm's strategic planning system must be designed to reflect its specific situational setting. In support of this, Lindsay and Rue (1980) found that the completeness of the planning process is positively related to the size of the firm, the age of the firm, and the level of environmental uncertainty. Fredrickson (1984) and Fredrickson and Mitchell (1984) found that planning comprehensiveness was positively related to performance in a stable environment and negatively related to performance in an unstable environment. Kukalis (1991) found that in complex environments, strategic plans were reviewed more frequently, and had shorter time horizons. Also that increasing environmental complexity tends to lead to increasing planning extensiveness. He comments that environmental complexity imposes restrictions on how far ahead a company can plan, and that while environmental complexity increases the need for strategic planning, it also makes longer range planning more difficult. Keppler et al (1979) comment that the higher the environmental dynamics the greater the need to adopt to the changing situation by innovations concerning objectives, strategies and management policies. At the same time it must be kept in mind that higher environmental dynamics will restrict the possibility of forecasting long-range development. Thus the need for and the possibility of long range planning are diametrically opposed. Whereas the increasing environmental dynamics are seen to increase the need for long-range planning, its execution will at the same time be made more difficult. The implication is that an Innovator, which operates in a rapidly changing environment with a high degree of uncertainty will tend to have extensive strategic planning, short time horizons with frequent plan reviews, whereas Adaptors, whose environments are more stable, will tend to have longer range plans which are reviewed less frequently.

Lindsay and Rue (1980) comment that different organisations employ the process of long-range planning to varying degrees of completeness. Using work by Ackoff (1970), Ansoff (1965), Drucker (1970) and Steiner (1969), Lindsay and Rue (1980) outline certain requirements for the completeness of the long-range planning process. These are:

1 be applicable to most, if not all, segments of the business.
2 contain objectives and goals.
3 contain the methods, procedures, and means for realising and implementing the goals and objectives.
4 contains some procedure for auditing and controlling the plan.

Lindsay and Rue (1980) found for large firms that as the complexity and instability of the environment increased, the degree of completeness of the long range planning process also increased. They found evidence to suggest that as the environmental complexity and instability increased there would be more participation of lower levels of the organisation, more use of external information, shorter planning horizons, more frequent reviews, and more immediate tangible goals set. They comment that one way in which organisations can attempt to reduce the uncertainty in their environment is by their use of formal planning systems. Research by Veliyath and Shortell (1993) into hospitals in the U.S. found that planning implementation was significantly greater in Prospectors than Defenders and that the innovativeness of the strategies generated by the planning systems of Prospectors was significantly greater the those generated by the planning systems of Defenders. The results of these studies suggests that companies attempt to fit their long range planning processes to their perceived environmental conditions. Thus, using the proposed model, it is suggested that as the rate of change of the environment increases the degree of completeness of the planning system will also increase with Innovators having the most complete systems. This view is supported by Armstrong (1982) who suggests that: formal planning is more important when external environmental changes are large; most organisations are designed to deal with small outside changes and typically resist internal changes, but for large changes in the external environment, the standard organisational response become less relevant. This is also supported by Thune and House (1970) who found that planning was more helpful in markets which were characterised by a high rate of technological innovation and new product introductions.

The method of strategic planning adopted by a company should not be considered in isolation from its organisational structure. Keppler et al (1979) proposed that the divisional form of organisation structure increases the need for planning due to the increased need for an integrating mechanism. The form of the structure will assist co-ordination in certain areas and thus reduce the need for planning, but will also increase the need for co-ordination in other areas. They also suggested that the extent of planning will have an influence on the structure of organisation. For example, a highly decentralised planning system will require the company to be structured in such a way as to counteract the tendency to disintegration, i.e. the planning system and the structure must be seen as a total integrated system. In support of this Steiner and Schollhammer (1975) found that size differentials among large companies had little effect on their planning systems, but that the complexity of the organisational structure was a major determinant. Keppler et al (1979) also comment that should plans be used as a means of integration or organisational decision making, a high level of co-ordination is necessary when establishing the plan itself. High requirements to find new, even radically new goals and strategies create a tendency to form central planning positions or departments in order to facilitate this co-ordination. Central planning positions and departments tend to be also used wherever a global description of operational functions is favoured. Thus an Innovative company which has a decentralised organisation structure may well have a centralised planning department in order to facilitate coordination, and so also may an Adaptor which has a matrix form of organisation for the same reason.

Al-Bazzaz and Grinyer (1980) in a survey of 48 U.K. Companies also found that country of ownership had an influence on the strategic planning system in addition to organisational structure, goals, and the degree of diversification.

2.5.3. Strategic Planning: Summary

It can be seen from the above that the main determinant of the strategic planning system as suggested by the literature are business environment, technology, corporate structure and strategy. Previous sections have discussed how the strategy is determined by and also determines the environment, technology, and structure. It can be seen from this review that strategy is linked to the strategic planning system by these same contingent factors. The literature also suggests that these contingent variables will influence the following aspects of the strategic planning systems:

- **top down/bottom up,** i.e whether the planning process is primarily from the centre or whether the process starts from the lower levels of management.
- **time horizon** i.e. the number of years into the future which are planned.
- **number of reviews** i.e. how often the plans are reviewed by management after they have been formulated
- **length of process** i.e. the time spent in developing the plan.

- **short term/long term goals** i.e. whether the emphasis is on the achievement of long term strategic objectives or on shorter term, usually financial, objectives.

The literature suggests that Innovators, who operate in rapidly changing environments and who seek to be pro-active, will tend to use bottom/up planning with fairly short time horizons, frequent reviews, but with long term strategic objectives. The planning system will be complete and extensive in scope in order to provide an integrative mechanism to co-ordinate the disparate parts of the organisation. Co-ordination may be through a central planning department. Adaptors will also use strategic planning to reduce uncertainty and protect the organisations core technology, whilst responding to changes in the environment. The system will be used in both top-down and bottom-up modes, the centre setting overall objectives for the divisions, and the divisions adopting a bottom up mode with their subsidiaries. The plans will be reviewed less frequently than those of the Innovators but will have a longer timescale due to the more stable environment. Co-ordination may be through a central planning department. Defenders may make use of strategic planning to communicate from the top down the goals of the top management. Goals will tend to be of a financial nature rather than strategic and annual plans will be of more importance for control purposes.

The literature relating to strategic planning is largely supportive of the previous proposition (Table 2.7) but adds further detail (shown in bold type) as to its scope and the nature of the systems employed (Table 2.11.).

Table 2.11 Strategic Type Characteristics: Strategic Planning

Strategic Types		
Innovators	Adaptors	Defenders
Strategic, Flexible, program orientated. **Bottom-up, short time horizons, frequent reviews, long term strategic objectives. Complete and extensive planning system: centralised planning department.**	Strategic, comprehensive with incremental changes. **Top-down/ bottom-up, less frequent reviews, longer time scale. Less intensive planning system: possible central planning department.**	Financial control dominated. Substantial capital investment. **Top-down, financial rather than strategic goals, irregular reviews.**

Little evidence was found for the hypothesized program orientation of planning in Innovators, or for the incremental nature of planning in Adaptors. The next section considers the literature relating to control in order to find supporting evidence for the hypothesized relationships between strategy and control (Table 2.7).

2.6. Control Systems

Previous sections have looked at the various strategic typologies and how these affect and are effected by the organisational structure and strategic planning systems. These means of strategy formation and implementation should not be seen as independent mechanisms but as part of an integrated and interacting system. Rotch (1993) comments that the interdependence of the components of a control system should be seen as a key factor in its design. When the components support each other, the interdependence is a source of strength; conflict or even absence of support among the components can be a source of weakness. This section reviews the literature on control systems and, in particular, the links between strategy and management's use of control systems.

One of the key ways that senior management can direct the actions of management is through the use of objectives and performance measures. By setting specific objectives for each level of management, the managers are made aware of senior management's expectations. This can be reinforced further by linking a managerial incentive scheme to the performance measurement system. In recent years, the concentration on formal, quantitative performance measurement and control systems has been seen as too narrow a focus. The scope has therefore been broadened to include both financial and non-financial measures, and qualitative as well as quantitative information. In addition, greater significance has been attached to the way in which the performance measurement system is used as part of the corporate control philosophy and as one of the mechanisms used to operationalise the corporate strategy. Jaworski (1988) suggests that when a fit exists between the environmental context and the control system in use, managerial performance will be higher than it would be in a non-fit situation.

Simons (1990) comments that we know surprisingly little about the effects of strategy on management control systems or, alternatively, about how these systems affect strategy. How do top management actually use planning and control systems to assist in the achievement of the organisations goals? How is the strategy translated and communicated to each level of management? The majority of writings on this subject has been normative and not based upon what companies actually do in practice. Previous research has attempted to develop the best way to design and use formal systems to help organisations implement their strategies and objectives (e.g. Anthony 1965). Recent studies have indicated that there are systematic differences in management control systems amongst companies that compete in different ways (e.g. Miller and Friesen, 1982, Govindarajan and Gupta, 1985, Simons, 1987). However, these large sample, cross sectional studies reveal little about the process of management control in these companies. They begin to answer the question "How do they differ?" but not "Why?".

In the first part of this section the various measures of performance available to management are reviewed. In the second part, the reasons why managers use particular measures is considered.

2.6.1. Performance Measures

Performance measures should not be seen in isolation but as an integral part of the overall management control system which includes, amongst other things, organisational structure and strategic planning. These components of the system interact and influence the types of measures used. It is generally agreed that managers who are involved in the planning process will require less monitoring than those who have the plans imposed upon them but will, however, have the opportunity to introduce bias and to pursue parochial self interest (Emmanuel et al, 1990). Adoption of such a procedure will influence the way divisions and divisional managers are evaluated and hence upon the performance measures used (Emmanuel et al, 1990). The planning procedure should encourage divisional managers to pursue actions that they are willing to take and that are consistent with top management's desires. Such goal congruence will lessen the emphasis on performance measures as the need for control will be reduced

One of the inherent problems with the more usual accounting performance measures e.g. Return on Capital Employed (ROCE), Return on Investment (ROI), Residual Income (RI), is that they have a short term focus (Hopwood, 1974, Kaplan et al 1989). Scapens (1979) comments that if a division's objective is expressed in terms of maximising the Net Present Value (NPV) of its projects, its actual performance should be measured in terms of NPV and that the use of accounting profit or accounting ROCE would be ineffective for control purposes. What is required is a short term measure which accurately reflects the long term objectives of the company. In maximising this short term measure the divisional manager also maximises the long term objectives i.e. NPV. Scapens (1979) proposes that an economic concept of profit satisfies such a requirement and that where divisional managers have control over their own investment in capital assets that the short run profit measure should include a charge for the use of such assets evaluated at the marginal cost of the optimum investment plan. He suggests that while Residual Income is not ideal it does meet a number of these criteria. Some attempts have been made to link RI to NPV, but this requires the use of annuity depreciation (Emmanuel et al, 1990). Other authors have advocated cash flow accounting: Lee (1972), Lawson (1978), Thomas (1980). Such an approach is not without its difficulties due to the problem of incorporating the capital invested in the various subsidiaries and of estimating the future cash flows with sufficient accuracy, whilst avoiding undue bias from divisional managers (Emmanuel et al, 1990). In support of this, Scapens (1979) states that under conditions of uncertainty a divisional objective of maximising NPV can give rise to difficulty. Divisional managers are usually in the best position to estimate the future cash flows of their divisions, but the use of such estimates may defeat the control function as divisional managers could bias their estimates in order to improve their apparent performance.

An extension of the idea of using cash flow accounting and the use of NPV to evaluate company performance is the concept of Shareholder Value Analysis (SVA). In the U.S. these concepts have been proposed and supported by Rappaport (1986) and Reimann (1987), and in the U.K. by Allen (1988). SVA is reliant on the identification of those elements of the business which determine cash flow and which, together with the cost of capital, enables the NPV of business strategies to be calculated (Mills, 1990a). Most methods require the calculation of two elements of value:

- the present value of net cash flows from operations during the forecast period and
- the "residual value" which represents the present value of the business attributable to the period beyond the forecast period.

The major problem with the method is the estimation of the residual value and the accurate forecasting of the cash flows. It can be used to evaluate alternative strategies but has similar problems to cash flow accounting in its use as a short term measure of performance.

Parker (1979) suggests that the traditional divisional profit measures have too narrow a perspective to indicate adequately the progress made towards corporate goals. Additional qualitative measures of performance are needed to reflect productivity, marketing effectiveness, social responsibility and human resource management. Companies need to move away from a single divisional profit-based index to provide an expanded number of measures of divisional performance which account for a broader range of success criteria. Kaplan et al (1989) also argue for the use of more than one performance measure on the grounds that it is impossible in a complex and uncertain environment for any single performance measure to achieve perfect goal congruence between a decentralised unit and the overall corporation.

Management thus have a number of performance measures available to them. One of the difficulties with setting performance measures is that most financial measures e.g. ROCE, RI, tend to be short term, whereas strategies are longer term in nature. In order to monitor the implementation of the strategy, the strategy needs to be broken down into a rolling stream of performance measures which can be reviewed frequently. The difficulty is setting the short term objectives (milestones) at the correct intervals so as to monitor progress, but at the same time to focus the attention of management not just on the next stretch of road but also on the destination. The type of measures used will be dependent upon the strategy to be implemented. Because management cannot focus on all aspects of the company at the same time it must focus its attention on specific aspects. Thus, while many measures of performance may be available, only a small subset will be actually used at any one time. The emphasis placed by management on particular measures will reflect the actual strategy of the management rather than that which it has incorporated into plans and mission statements. It is this strategy which will be perceived by the lower levels of management within the company and which will be operationalised. Thus measures, though available, may not be used by managers or may not be the focus of their attention. Recent work by Simons (1990, 1991) has focused on the use made by management of control systems and in particular their use to formulate and implement strategy.

2.6.2. Management Use of Strategic Control Systems

Previous work (Anthony, 1965, 1988) has assumed that strategy is determined first and has attempted to describe the monitoring and control systems which are used to support this strategy. When, however, strategy is viewed as an incremental and emergent process (Mintzberg 1978; Quinn 1980), questions about this relationship arise. Work by Bourgeois and Brodwin (1984), Mintzberg and McHugh (1985), and Burgelman (1983a,b) has directed attention onto strategy development and the use of the management control systems in this process. Work by Simons (1990) has attempted to show that management control systems are not only important for strategy implementation but also for strategy formation. His definition of management control systems therefore recognises that these systems are more than devices of constraint and monitoring: management control systems are the formalised procedures and systems that use information to maintain or alter patterns in organisational activity. These systems broadly include formalised procedures for planning, budgeting, environmental scanning, competitor analysis, performance reporting and evaluation, resource allocation and employee rewards (Simons, 1987). Thus Simon's work draws upon the ideas of strategic decision making (e.g. Braybrooke and Lindblom, 1963; Quinn, 1980) and strategic change (e.g. Miller and Friesen, 1980; Mintzberg and Waters, 1982). Simon's (1990) research has sought to determine the nature and extent of differences in the control systems of firms which follow different business strategies. Using the Miles and Snow (1978) strategic typology of Defenders, Prospectors and Analysers, Simons (1987) sought to investigate, from an accounting perspective, which specific attributes of control system design differ with a firm's strategy. He concluded that firms following different strategies did indeed employ accounting control systems in different ways and offered some preliminary conclusions concerning the attributes which might differ according to strategy. Prospectors seemed to attach a great deal of importance to forecast data in control systems, setting tight budget goals, and monitoring outputs carefully. Cost control was reduced and large firms appeared to emphasis frequent reporting and the use of uniform control systems. In contrast, Defenders appeared to use their control systems less intensively, negative relationships being noted between performance and elements such as tight budget goals and output monitoring. Bonus remuneration based on the achievement of budget targets was emphasised. There was little change in their control systems. Simons (1987) concludes that effective Prospectors use their financial control systems more intensively than Defenders, with tighter budget goals and more frequent reporting, and place more emphasis on forecasts and outputs than on cost controls. These results are in accordance with previous research by Kamm (1980) who found that control was tightest in companies which were perceived to have the highest level of product/market innovation i.e Prospectors. Miles and Snow (1978) argue that Prospectors' control systems will be orientated towards effectiveness in maintaining product-market innovation. The expectation is therefore that Prospectors will rely less on financial controls than on qualitative and non-financial controls such as the rate of product-market innovation. This view is supported by a number of authors (Utterback and Abernathy, 1975; Hayes and Abernathy, 1980; Kaplan, 1983) who argue that financial controls may be partially incompatible with the emphasis appropriate to the early stages of a product's life cycle. Others (Ouchi, 1979; Hirst, 1983; Govindarajan, 1984) also argue that tight budget goals may discourage product-market experimentation and may be poorly adapted to the more uncertain environment in which the Prospector operates. There are thus some apparent inconsistencies in the findings of various researchers, some arguing that Prospectors will have tight financial controls, whereas others view this as inconsistent with their strategy of innovation.

Dent (1990) proposes a number of explanations for these inconsistencies. He suggests that Prospectors' organisational arrangements may be conductive to innovative excess (Miller and Friesen, 1982): that the autonomy granted to lower level managers over product development and market introduction decisions may lead to over-zealous experimentations; that the senior managers of Prospectors may use their control systems to keep the risk taking of the managers of subsidiaries within acceptable limits; that the greater task and environmental uncertainty faced by these firms may call for more frequent performance monitoring to facilitate organisational learning; and that the wide scope of Prospectors' activities may encourage the use of financial controls as a common denominator. Defender organisations have greater stability of activities, hence cost control imposed through rigorous budgetary control systems may be inefficient. Dent (1990) argues that efficiency in production and distribution may be better promoted through direct investment in physical systems and the monitoring of quality, "first time through" capabilities and inventory levels (Kaplan, 1983) and that the narrow focus of Defenders and the detailed expertise of top managers may facilitate the use of such physical measures. Also, these firms are typically more capital intensive (Hambrick, 1983a) with lower direct costs than Prospectors, and therefore financial controls may be less effective than controls related to controlling capacity costs (Kaplan, 1983). Thus, the literature is uncertain as to the precise links between financial control systems and strategy, some authors suggesting that innovative companies will place little reliance upon financial controls as these will tend to stifle innovation, whereas others argue that senior managers may need to rely upon such control to ensure that subsidiary management are kept within reasonable bounds. The main difference appears to be one of focus, Prospectors concentrating on external performance measures and Defenders on internal measures.

The study by Simons (1987) has as its main focus the financial control practices of companies. There is therefore a need for a wider perspective which includes the broader strategic and operational planning activities and non-financial performance measurement. Dent (1990) comments that little, beyond hypothesis, is known of how these systems are actually used and what significance they are afforded in each type of strategy, or how similar systems may be used in very different ways and thus may be more or less tightly coupled to action. One of the purposes of the present study is to investigate the relationship between control systems and strategy: how does strategy affect the control systems used, and how do the control systems affect the formation of strategy? Using the proposed typology, it is proposed that Innovators, who operate in a rapidly changing environment and who seek to be pro-active towards that environment, might be expected to emphasise performance measures such as new product development, sales volume of products, market penetration, sales growth, with profitability and financial stability having less emphasis. That measures would tend to be qualitative rather than quantitative and be long term in nature. In contrast, it is proposed that Defenders, who operate in a relatively stable environment with a low degree of pro-activity, might be expected to emphasise cost control, productivity, profitability, financial stability and market share, and that measures would tend to be quantitative rather than qualitative and be short term in nature. It is proposed that Adaptors, who operate in the middle ground, would tend to seek a balance between these two by measuring their performance in terms of both the market and the profitability of products. That financial performance in terms of profitability and financial stability would also be important and that measures would be both qualitative and quantitative, the company seeking to balance short and longer term performance.

In seeking to understand the differences in behaviour between companies adopting different strategies, Simons (1990) proposes a process model which uses the concepts of: limited attention of managers; strategic uncertainties; interactive management control; and organisational learning. He suggests that top managers have neither the time nor the capacity to process all the information available to them and thus, only a limited subset of an organisation's formal management control process can have their attention, most areas of control being delegated to subordinates. Because of these attention constraints, managers must rank the set of activities they monitor from most critical to least critical. This ranking allows managers to concentrate on the strategic uncertainties which arise due to the specific strategies which they have adopted. Those aspects of the control systems which the senior management use to monitor actively and intervene in the on going decisions of subordinates, are termed interactive. Since this intervention provides an opportunity for top management to debate and challenge underlying data, assumptions and action plans, interactive management controls demand regular attention from operating subordinates at all levels of the company. Programmed controls, by contrast, rely heavily on the staff specialists in preparing and interpreting information and receives little attention from top managers. By emphasising certain management controls and making them interactive, top managers ensure that the organisation is responsive to the opportunities and threats that the firm's strategic uncertainties present. This distinction between the interactive and diagnostic use of control systems offers some explanation for the previous problem with innovative companies' use of financial controls. When the Company's financial performance is within acceptable limits e.g. above the minimum financial criteria, the financial control system will be used diagnostically, emphasis being placed on the longer term via, for example, the strategic planning and review process. Only when the financial performance is outside acceptable limits will management focus upon it and use the financial control system interactively.

The interactive management control processes can be used to manage emergent strategy. Rather than focusing on what the organisation already understands and does well, these systems can be used to direct organisational attention to emerging threats and opportunities (Simons, 1990). As employees throughout the organisation respond to the interactive management control process and are challenged to assess new information and action plans, new strategic initiatives are likely to emerge. Thus, by using a control system interactively, top management can guide organisational learning and thereby unobtrusively influence the process of strategy making throughout the organisation (Simons 1991).

Simons (1990) developed a model to illustrate that the choice of system to be used interactively depends on an assessment of strategic uncertainties by top managers. These strategic uncertainties do not relate to what the firm knows how to do well, but to threats and opportunities due to changing circumstances. Top management focus their attention on strategic uncertainties that could derail their vision for the future and use selected systems interactively to focus the attention of the entire organisation on the uncertainties. This implies that a company operating in a rapidly changing environment will tend to focus its attention on external factors in order to reduce its uncertainty. In contrast, a company operating in a relatively stable environment will tend to focus its attention on internal factors. This is supportive of the proposition (Table 2.7) that companies adopting an Innovative strategy in response to a rapidly changing environment will tend to have an external focus to their control systems, whereas companies adopting a Defender strategy will have an internal focus.

Simon's (1990) analysis of thirty businesses in the health care products industry indicated that company management choose among five different types of control systems:

- **Program Management Systems**, where the system is used to monitor discrete blocks of organisational activity, usually on a project basis;
- **Profit Planning Systems**, where the system is used to focus on individual business units, and encompasses profit plans and budgets, forecasts, and long range plans;
- **Brand Revenue Systems** which focus on the profitability and market share of individual brands;
- **Intelligence Systems**, which gather information about the social, political, and technical environments of the business, and ;
- **Human Development Systems**, which include strategic manpower planning, management by objectives, career planning and counselling, and succession planning.

Simons found that top management with a clear sense of strategic vision chose one management control system to use interactively; all other management control systems being used diagnostically (see Table 2.12). Top managers did not spend a lot of time monitoring the critical success factors associated with current strategies, but focused on systems that produce and monitor information on the strategic uncertainties that are associated with the visions of the future. This choice by top managers as to which control systems to use diagnostically and which interactively represents an element of strategic choice (Child 1972). This establishes a clear link between the strategy adopted by a company and its use of control systems. The particular strategy adopted may be as a result of a conscious choice by the company's senior management or be due to the gradual emergence of that strategy (Mintzberg, 1990; Campbell, 1991). Interactive control systems are used by top management to guide the informal strategy making process by forcing personal involvement, intimacy with issues, and commitment (Mintzberg, 1987a). Thus senior management are able to control emergent as well as planned strategies by means of their use of control systems.

Top management of the businesses in Simon's (1990) study were able to articulate a clear sense of how they believed their businesses would compete and evolve in the future. In each case the top manager's choice of which system to use interactively related to the strategic uncertainties which they attached to the business's future, for example, companies in emerging, rapidly growing markets focused their attention on human development systems since the key issue was the management of change and the development of an effective organisation. Little attention was paid to product development or financial results.

Table 2.12 Strategic Orientation and Attention to Control Systems

Strategic Orientation	Business Environment	Strategic Uncertainties	Interactive Control System	Control System Focus	Organisation Structure	Planning Horizon
high margin, patent protected niche	protected markets:	changes in the rules of competition	Intelligence System: constant environmental scanning	social, political, and technological environment	centralised with strong research and finance groups.	product and market, extremely long, 5-10 years; strategic, long term
premium price through product and market innovation	competitive markets: rapid change; complex products and technologies	development and protection of new products and markets	Profit Planning: revision and discussion of profit plans but focus on products and market	changing customer needs and competitive new product introductions	decentralised: profit planning promotes integration	new products and markets, short term, 6-12 months; strategic, 3 years
barriers to entry through brand marketing	strongly competitive markets: stable products, little innovation	extending attractiveness and life cycle of mature products	Brand Revenue System: weekly review of each brand's sales in units and revenue	impact of price, promotion and packaging on customer buying habits; focus on market share	brand structure: brand marketing with shared manufacturing; strong centralised finance and control functions	promotion, very short term, 1-2 months; strategic, less than 2 years
low cost, high volume	competitive markets; relatively stable	fundamental changes in technology which undermine ability to deliver cost-effective products	Project Management: new programs and miles stone; weekly or bi-monthly reviews	competitor products, customer needs, emerging technologies	functionally; programs bridge functional boundaries	project orientated, 1-2 years; strategic, little emphasis
no clear vision	rapid early growth:	levering skills into competitive advantage	Human Development System: strategic manpower systems, management by objectives, career planning	organisational capabilities; the management of change; development of company culture		

From Simons (1991), Strategic Orientation and Top Management Attention to Control Systems

Thus it might be expected that each of the proposed strategy types (Innovators, Adaptors, Defenders) will have associated strategic uncertainties and will therefore tend to use one of the above five types of control system interactively. Innovators face the strategic uncertainties of competitors developing similar products, changes in markets and changes in the rules of competition. Their attention will therefore be focused on products and markets and either the Intelligence System or the Profit Planning System will be used interactively. Table 2.12 reveals a distinction between Innovators who are able to protect their products through patents and those which rely upon constant innovation. The use of patents allows a company to create an island of stability in an otherwise rapidly changing environment. Those companies which do not enjoy such protection must continue to introduce new products in order to maintain their position. Adaptors face the uncertainty of whether their existing products will continue to be attractive to customers and whether they will be able to develop new products to replace them. Their attention will be focused upon the impact of their current marketing strategies upon market share and thus the Brand Revenue System will tend to be used interactively. Defenders face the strategic uncertainty that changes in technology or customer demands will make the existing production methods obsolete. Their focus on productivity and cost reduction will mean that the Project Management system will tend to be used interactively to monitor costs and new investments.

The findings of Simons (1990) regarding organisational structure are broadly in agreement with the previous discussion on strategy and structure. Innovators tended to be decentralised, using profit planning to promote integration. Adaptors tended to adopt more of a divisional structure based upon brands but with a strong centralised finance and control function. Defenders organised themselves functionally. This work by Simons is based on the U.S. Health Care industry and as a consequence there is no consideration of the effects of foreign sales on the organisation structure, the focus being on domestic markets. There is also some discrepancy between the time horizons of the strategic plans, Innovators being longer than Adaptors whereas the previous analysis argued that Innovators would have a shorter planning horizon due to the instability of the market and the consequent difficulty of making longer term forecasts. This discrepancy is possibly due to the study by Simons being focused on one industry, whereas the previous analysis emphasised different business environments.

Simons (1990) also found that companies in crisis tended to use all control systems interactively. These were companies in transition which were undergoing revolutionary rather than evolutionary change. The business strategy was survival and management focus was on all aspects of the business. Once the crisis was over, management's attention began to focus on their chosen long term strategy. At this point their attention was withdrawn from all but one of the control systems this being used interactively and all others being used diagnostically. This would also be the case when a company was seeking to change its strategy, the uncertainty in both the internal and external environment causing management to focus its attention on all aspects of the business. After the change, the control system which was previously used in an interactive way would probably be used diagnostically and a new system used interactively.

Simons found that companies without strategic vision did not use any systems interactively. They were without long term direction and so did not need control systems to focus management's attention.

2.6.3. Links between Management Control Systems and Strategic Typologies

Table 2.13 shows the tentative links made by Simons (1990) between management accounting control systems and the Strategic Typologies of Mintzberg (1973), Miles and Snow (1978) and Porter (1980), using two firms in the same industry. Company A adopted a Porter generic strategy of Cost Leadership, and Company B of Differentiation.

Table 2.13: Comparison of Competitive Characteristic and Top-Level Management Control Systems used at two Companies

	Company A	Company B
Competitive characteristics		
Miles & Snow (1978)	Defender	Prospector
Mintzberg (1973)	Adaptive	Entrepreneurial
Porter (1980)	Overall Cost Leader	Differentiation
Management control systems at top management levels		
Strategic planning review	Sporadic. Not used actively in managing the business	Intensive annual process
Financial goals	Set by top management. Top-down.	Established by business units. Bottom-up.
Budget preparation and review	Prepared to meet financial goals	Focus on strategy and tactics
Budget revision and updates	Not revised during budget year	On going revision
Program reviews	Intensive monitoring	Limited monitoring
Evaluation and rewards	2/3 on profits 1/3 on personal goals	Subjective evaluation

From Simons 1990

Company A, having adopted a Cost Leadership strategy, focused its attention on that subset of strategic uncertainties which related to this strategy, i.e. new product technologies or attributes which could shift existing low cost advantage. Programs focused on cost improvement with equal or better quality and enhancements to existing products to help customers become more efficient. Little management attention was given to long range planning, profit planning and budgeting or incentive reward systems. These were all programmed.

Company B, on the other hand, having adopted a strategy of Differentiation through product innovation, focused its attention on strategic planning and budgeting. This was used to focus lower management's attention on current and future product/market strategies. Budget discussions during the year concentrated upon unanticipated changes in the competitive environment, marketing tactics to pre-empt competitor actions and the type and timing of new product development. The incentive payment system was also used interactively being based upon the subjective judgement of individual performance rather than financial measures.

In the proposed typology, company A's strategy would be that of Defender. Comparing Table 2.13 with the proposed characteristics of Defenders (Table 2.7) reveals certain similarities. The planning in company A was sporadic, the five year plan not having been revised in the past two years. The plan was used for information rather than for running the business. The main emphasis was on the short term financial performance and annual budgets were used for this purpose with frequent monitoring of actual performance against budget. Financial goals were set by top management and communicated top-down. Thus, planning was financial control dominated which emphasised the short term. In contrast to this, company B, which could be classified as adopting an Innovator strategy, placed great emphasis on its strategic plan, using it to focus management attention upon the longer term goals. The budgets were used as a tool to facilitate communication rather than as short term monitoring device. Thus, long term strategic goals were emphasised rather than short term financial performance. The Simons study also indicates that the monitoring of Innovators will be less formal, the emphasis being on the future rather than the past. In contrast, Defenders will be subject to the intensive monitoring of short term performance. The study is supportive of the conclusions drawn in the section on strategic planning where it was proposed that Innovators would tend to be bottom/up planners with fairly frequent reviews but with long term strategic objectives. It also supports the view that Defenders tend to set financial rather than strategic goals and that the emphasis is on the short term performance against budget.

Simons: Summary

The process model of the relationship between business strategy and management control systems proposed by Simons provides a good explanatory framework for the links between strategy and management's use of control systems. Its emphasis on the dynamic relationship between strategic position, management control and strategy making is important for the current study where the idea of strategic choice (Child 1972) has been used to explain the interdependency between strategy and structure, strategy and strategic planning and now, strategy and management control. The Simons model shows how the choice of control system affects strategy and strategy formation so that management's view of the world is affected by their choice of such systems. Given that choice, it is difficult for management to change strategies. This is because the very choice of which control system to make interactive, limits the information which is being presented to them upon which the decision to change strategy would be based. Only in times of crisis, when more systems become interactive, will dramatic changes of strategy be made.

Simon's model provides further evidence for the links between the proposed strategic typology and the management control systems: organisational structure, strategic planning and control. These are set out in Table 2.14. Comparison of these characteristics and those proposed previously for Structure (Table 2.10), Strategic Planning (Table 2.11) reveal close similarities, e.g. decentralised structure for Innovators, functional structure for Defenders, bottom-up planning for Innovators.

Table 2.14 Strategic Type Characteristics: Strategic Control

	Strategic Types		
	Innovators	Adaptors	Defenders
Structure	Decentralised	Product divisional structure. Strong centralised finance and control function.	Functional.
Planning	Planning system used interactively. Bottom-up, frequent reviews. Long term strategic objectives.		Planning system used diagnostically.
Control	External focus to control systems. Intelligence system used interactively. Emphasis on long term subjective performance measures rather than short term financial. Informal rather than formal.	Brand revenue system used interactively. Both quantitative and qualitative, balancing short and long term performance.	Internal focus to control systems. Project management system used interactively. Intensive monitoring of short term performance against budget. Financial rather than strategic goals. Quantitative, short term.

2.6.4. Strategic Management Styles

The work by Goold and Campbell (1987a,b,c, 1988) and Goold and Quinn (1990) introduces the concept of strategic control styles and the role of the centre in managing diversified corporations. Goold and Campbell (1987c) analyse sixteen companies using the dimensions of planning influence: high corporate to largely business, and control influence: flexible strategic to tight financial (see Figure 2.8). From this analysis they propose three successful Strategic Management Styles: Strategic Planning, Strategic Control and Financial Control. These are described in detail in Appendix B and summarised in Table 2.15.

Table 2.15 Strategic Control Styles

	Strategic Planning	Strategic Control	Financial Control
Organisational structure and overlap management	Centre coordinates between businesses.	Prefer to avoid overlaps between businesses and divisions.	Actively discourage overlaps between businesses.
Themes, thrusts and suggestions	Centre proposes themes and thrusts to direct business unit strategy.	Centre avoids themes and thrusts.	
	Centre makes suggestions based on knowledge of the business.	Centre cautious with suggestions.	Centre may offer suggestions, but business has the final decision.
Strategy Making	Profit centre proposes strategy. Central coordination.	Profit centres are the primary source of strategy. Some corporate coordination.	Profit centres set strategies. Little corporate intervention.
Planning process	Extensive formal planning and budgeting process.		Budgeting only.
	Budget intended to be detailed first year of strategy plan.		Budget is an end in itself.
	Often selective focus on main issues.	Comprehensive, annual review with each business.	Review of annual budget only
	Planning used both to audit the quality of thinking in the business and to bring together ideas from the centre and elsewhere (multiple perspectives).	Planning used to audit the quality of thinking in the businesses.	Budget reviews provide the opportunity for a wider discussion of strategy.
Objectives	Objectives give precision to the strategic plan.	Objectives arise from strategic plans, but are also used to set short term performance standards.	Annual budget is a "contract". "Improvements" are expected each year.
	Business proposes targets; centre reviews for acceptability.		Centre "stretches" targets.
	Objectives include long term goals, short term strategic milestones and budget targets. Budget is essentially first year of strategy.		Financial objectives dominate.
Performance monitoring	Centre seldom comments on performance versus plan, except with major deviations.		Centre comments frequently and directly on performance versus plans and insists on action plans to correct variances.

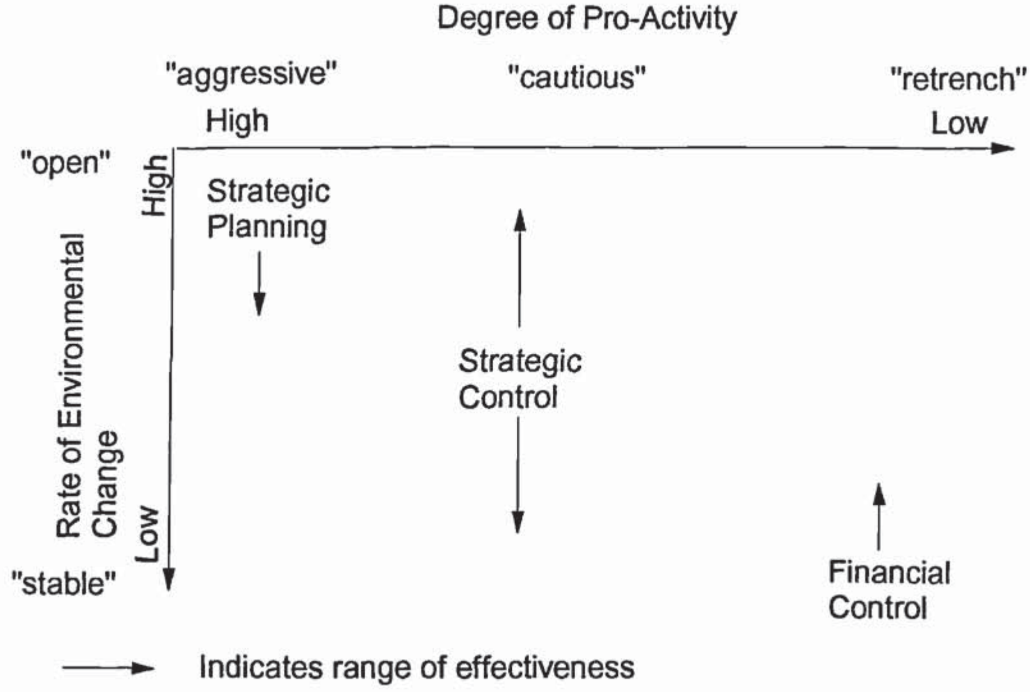
Figure 2.8 Strategic Control Styles

When comparing the various styles, Goold and Campbell (1987c) stress that many style differences relate less to formal structures and systems than ways in which they are operated. Budgetary processes, capital approval systems and informal flows may look similar but the important differences lie in the attitudes and intentions of top management and, therefore, in the way in which formal systems are used. This observation provides an important link with the work of Simons (1987, 1990, 1991) who focuses on the senior management's use of the control systems to direct management attention onto strategic uncertainties.

Goold and Campbell (1987c) argue that different styles are more or less suited to different business circumstances and propose two main contingent variables: nature of the business (shape of the portfolio, size and payback of investments, stability of the competitive environment); and resources of the organisation (financial condition, CEO personality, senior management skills). The shape of the portfolio determines the nature of the control required from the centre, tight financial for highly diverse organisations and high planning influence for highly integrated organisations. The larger the size of discrete investments, the more the need for central planning, whereas the longer the payback, the greater the need for flexibility. The stability of the competitive environment is seen as a major determinant of the strategic planning style. Goold and Campbell (1987c) describe three types of competitive environment: open, fierce and stable. Open environments are mainly characterised by a high level of market uncertainty, fierce by a high level of competitive uncertainty and stable by a more predictable business situation. For each type of environment a particular strategic control style is seen as being most appropriate, depending upon the response of the management. A Strategic Planning style is proposed as being best suited to an "open" environment or a "fierce" environment if the management adopt an aggressive stance against the competition. A Strategic Control style is proposed as being best suited to a "fierce" environment if the management adopts a cautious stance to the competition. A Financial Control style is proposed as being best suited to a "stable" environment and a "fierce" environment if the management adopts a retrench stance to the competition.

This analysis by Goold and Campbell (1987c) has a number of links to the proposed model of strategic types (Figure 2.6). The "open" environment is characterised by a high rate of change in the business environment with the companies within it adopting a pro-active stance. In the proposed model this type of company are termed Innovators. This would indicate therefore that Innovators would tend towards a Strategic Planning style of strategic control. The "fierce" environment is characterised by a high level of competitive uncertainty. It is not clear what the rate of environmental change will be in such circumstances although the possible reasons suggested by Goold and Campbell (1987c) ie volatility in demand for products, aggression of one or more competitors, or technologically driven substitution, suggest a fairly high rate of environmental change. In this environment Goold and Campbell (1987c) suggest that the degree of pro-activity is the major determinant of the strategic control style, a pro-active company adopting a Strategic Planning style, a less pro-active company a Strategic Control style and a reactive company a Financial Control Style. In a stable environment they propose either a Strategic Control or Financial Control style but with a tendency towards Financial Control (see also Goold et al, 1993 for further confirmation of this proposition). Comparing the proposed model with that of Goold and Campbell there appear to be tentative links between the two models, Innovators tending to adopt a Strategic Planning style, Adaptors a Strategic Control style and Defenders a Financial Control Style. The links are tentative due to the imprecise link made between "fierce" competition and the rate of change of the environment, the Strategic Control style being viable in a wide range of environments depending on the degree of pro-activity of the company. Figure 2.9 illustrates these links between the proposed model and Strategic Control styles.

Figure 2.9 Mapping of Strategic Control Styles to Proposed Model



The financial condition of the organisation as a whole is seen as important by Goold and Campbell (1987c). When cash is tight, financial controls are needed and the company will tend towards a Financial Control Style. The personality of the CEO is also critical to the management style as are the skills of the senior management. Goold and Campbell (1987c) found that the major influences to a company changing its style of strategic control were these factors: changes in financial condition, changes in CEO, changes in senior management. The external factors effecting the nature of the business: shape of the portfolio, investments, competitive environment might be changing but the business might retain its current style until a change in resources precipitates the change: financial crisis, change in CEO, change in senior management. This can be though of in terms of paradigms (Ranson et al, 1980; Jonsson and Lundin, 1977), the organisation being locked into a particular set of beliefs, values and theories of action until an uncoupling and recoupling takes place, often precipitated by crisis or a change of management.

If the above analysis is correct we would expect to find some correspondence between the characteristics of the three strategic control styles proposed by Goold and Campbell (1987c) and the characteristics of the proposed strategic typology. Goold and Campbell do not focus on the actual organisational structure e.g. decentralised, centralised, but on the degree of overlaps between the businesses and the degree of coordination between them. They suggest that a Strategic Planning company will have a high degree of overlaps and a strong need for coordination between the businesses, thus leading to a more complex organisational structure e.g. matrix, whereas a Financial Control company will have few overlaps and little need for central coordination and will thus tend to have a simpler structure e.g. area divisional. This view corresponds to the findings of the literature review of strategy and organisational structure (Table 2.10) where it was suggested that Defenders would have a simple "mechanistic" structure and Innovators a more complex "organic" structure with strong integrating and coordinating mechanisms. Their research does, however, indicate that companies operating in stable environments tend to fragment i.e. have more operating companies, than companies which operate in more dynamic environments, there being less need for coordination. This is contrary to prior research which suggests that companies operating in static environments will be more centralised than those operating in dynamic environments as this is more efficient. The company data on style changes given by Goold and Campbell indicates that where the business environment has become more dynamic, companies which were previously centralised have moved to a more decentralised structure. This was mainly to allow more autonomy to business unit managers and to promote a more bottom up mode of strategy formulation (a move towards Strategic Planning or Strategic Control styles). Goold and Campbell (1987c) suggest that the guiding theme of the structure of Financial Control companies is simplicity and accountability. They suggest that such companies go to some lengths to create stand-alone business units which operate within clear lines of responsibility. They found that the main philosophy of such companies was decentralisation. There is therefore agreement in terms of the degree of complexity of the organisation: "mechanistic/simple" for stable environments and "organic" for dynamic environments, but not as regards the degree of decentralisation.

There appears to be close agreement between the strategy making and planning processes described by Goold and Campbell and those indicated by the literature review (Table 2.11). Goold and Campbell suggest that Strategic Planning and Strategic Control companies which operate in dynamic environments (Innovators and Adaptors) will have an extensive strategic planning process which tend to use a bottom-up process, whereas Financial Control companies which tend to operate in more static environments (Defenders) will concentrate on top-down imposed financial targets. There is also close agreement between the Objectives and Performance Monitoring proposed by Goold and Campbell and the Control mechanisms suggested by Simons (Table 2.14), companies operating in a dynamic environment tending to use more long term strategic measures and companies operating in static environments tending to use more short term financial measures. It is concluded that there is close agreement between the proposed model of strategic typologies and the strategic control typology of Goold and Campbell. There are a number of overlaps due to the difference of emphasis of the two typologies, Goold and Campbell's focusing on the role of the centre in managing diversified companies and the proposed typology focusing on the interaction of the company with the business environment, strategy formulation and strategic control mechanisms.

2.7. Chapter Summary and Conclusions

The first part of this chapter reviewed the literature on the various aspects of strategy: strategy formation, decision making, and strategic change, including the various understandings of the strategic process in order to provide a basis of understanding for the subsequent investigation. It was concluded that there is a general agreement amongst researchers that strategy is concerned with the alignment of a business with its environment, but that there are a number of viewpoints and differences in emphasis. Some viewed strategy as being intended and constructed before the event, others that it emerges from the stream of decisions made by management. Some saw it as a rational process whilst others viewed it as incremental and disjointed. It was seen by some as a way of enabling a company to respond to its environment whereas other saw it as one of the causes of inertia to change. It could be a mechanism which enabled a company to take a new perspective on its environment but it could also act as a filter to new information and confirm a company in its present position.

The second part of the chapter reviewed the literature on strategic typologies. It was found that there are a number of typologies which at first inspection appear to be mutually exclusive. Rather than choose one of these typologies for the subsequent analysis it was decided to attempt to provide a synthesis which drew out the differences and added to the richness of the analysis. From previous research, a number of tentative links between the various typologies were explored. In particular, the dimensions of Business Pro-Activity and Environmental Change was used to show a tentative correspondence between the typologies of Mintzberg (1973), Miles and Snow (1978) and Porter (1980). It was subsequently proposed that these two dimensions provided a plausible explanation of the reasons for the need for different strategies in order to be successful in different business environments. A model incorporating these two dimensions was proposed as a synthesis of the *three typologies*.

The third part of this chapter reviewed the literature relating to strategy and structure, strategy and planning and strategy and control in order to validate and extend the proposed model along these dimensions. The literature on strategy and structure suggested strong links between a company's strategy and its organisational structure but weaker evidence for the specific type of structure adopted. It was found from the literature on strategic planning that the main contingent variables for the determination of the system were business environment, technology and organisational structure, and that these same variables also linked strategy to strategic planning. In the area of control, a number of links were found between the strategy adopted by a company and its control systems. In particular the work of Simons (1987, 1990) was used to provide an explanation for management's use of control systems. An analysis of the work of Goold and Campbell revealed close links between their strategic control styles and the proposed typology.

During the course of this chapter, a number of propositions have been made regarding the relationship of company strategy to the business environment and to the management control systems used to implement and control that strategy. The next chapter provides a statement of these propositions together with a definition of the scope of the current research.

Chapter 3: Statement of Scope, Purpose and Propositions

3.1. Scope and Purpose

This research concentrates on the links between the strategies adopted by companies and the mechanisms used to control the organisation. The study focuses on the strategic dimension of control rather than managerial or operational control, thus, for example, strategic planning is considered but not annual budgets. The research does not attempt to derive causal laws which are able to be generalised but looks at specific associations between various aspects of strategy and strategic control. The purpose is to further our understanding of these relationships and to provide a framework for subsequent analysis. In particular, the research concentrates upon the relationship between strategy and the organisational structure, strategic planning systems, and control systems.

3.2. Propositions

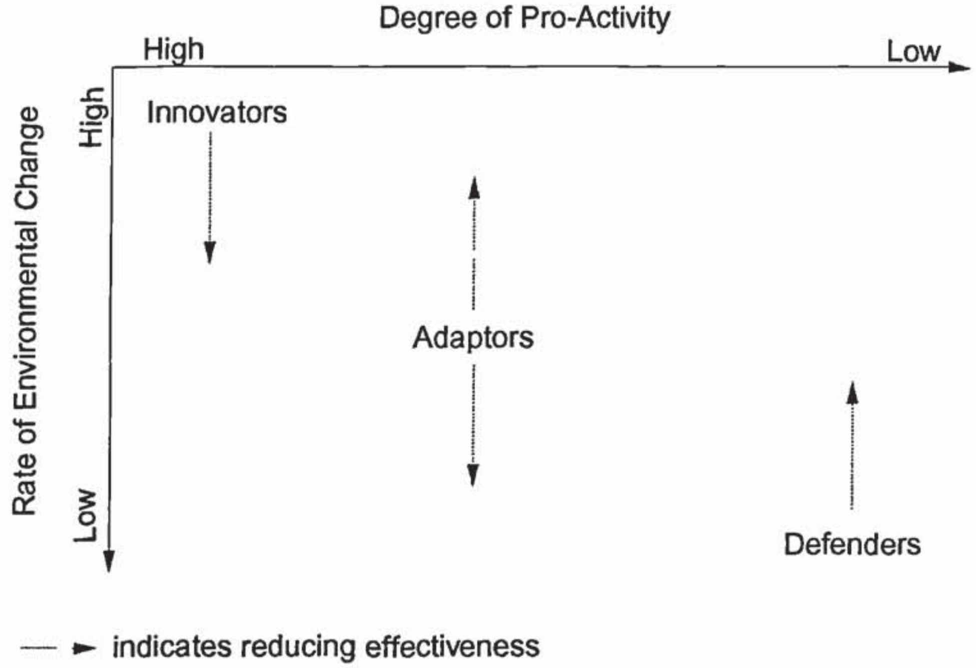
The following sets out the main propositions which have been derived from a review of the literature.

3.2.1. Business Pro-Activity and Environmental Change

The main proposition of the research is that the dimensions of Business Pro-Activity and Environmental Change provide a plausible explanation of the reasons why companies adopt different strategies in order to be successful in different markets. These ideas derive from the work of Child (1972), Weick (1969, 1977), Duncan (1972), Mintzberg (1973, 1987a), Miles and Snow (1978), Galbraith and Nathanson (1979), Porter (1980, 1985), Burgelman (1983a), Hambrick (1983a), Zahra (1987), McKee at al (1989), Segev (1989), Turton (1991) and Ansoff and Sullivan (1993) and are more fully discussed in Chapter 2. The model illustrated in figure 2.6 (reproduced below) is proposed as a summary of this research. Innovators are particular types of Porter's Differentiators which differentiate by means of product innovation. They correspond to Miles and Snow's Prospectors and will tend to be those companies which use an Entrepreneurial mode of strategy making. Adaptors are a particular type of Differentiator but this time by means of marketing. They have some correspondence to Miles and Snow's Analysers and will tend to be those companies which use an Adaptive mode of strategy making. Defenders are those which seek to defend their current position, often by being the lowest cost producers in their market. They are congruent with Miles and Snow's Defenders and will tend to be those which use a Planning mode of strategy making.

The proposed model has, as its underlying thesis, that a company will be most successful in its business environment when its rate of pro-activity towards that environment is in

Figure 2.6 Proposed Model of Strategic Types



accord with the rate of change of that environment (environmental dynamism). It is based upon the idea of the adaptive cycle proposed by Miles and Snow (1978) by which a company aligns its strategy with the environment and overcomes the three sets of problems: entrepreneurial, engineering and administrative. Such a theory of co-alignment uses the concept of strategic choice (Child 1972): that major decisions made by management serve to define the organisation's relationship with that environment, rather than being purely a reaction of the company to that environment i.e. that a company can be both pro-active and re-active towards its environment. It also draws upon the ideas of Porter (1980,1985) who sees a company attempting to take a defensible position against the five competitive forces within an industry by taking either an offensive or defensive position: re-active, pro-active, awareness. In contrast to Miles and Snow, however, the proposed model sees strategy as an adaptive mechanism rather than being relatively immutable, and suggests that a company can change its degree of pro-activity to the market, and in fact must make such changes when the rate of change of the environment is itself varying. Innovators will be better able to exploit a business environment which has a high rate of change. In fact, it may be the Innovators who are promoting the changes in the business environment in order to profit by their particular strategic stance. In a more stable environment they are less profitable than Adaptors. Their degree of success reduces as the rate of change of the business environment decreases, or where they have little influence over the rate of change. Defenders, on the other hand, are most successful in a slowly changing business environment with relatively stable products and markets. As the rate of change of the environment increases they become less successful. Adaptors occupy the middle ground, responding to changes in the environment rather than seeking to be a significant promoter of that change. They are able to succeed best in the middle ground where the Innovators are less successful due to the rate of environmental change being less than the relatively high rates which they require, and the Defenders due to the rate of environmental change being more than the relatively low rates which they require.

3.2.2. Organisational Structure

The literature suggests that a company adopting a particular strategy in response to it business environment will also adopt a distinctive organisational structure (Burns and Stalker, 1961; Lawrence and Lorsch, 1967; Miles and Snow, 1978; Egelhoff, 1982, 1988; Govindarajan, 1986; Hamilton and Shergill, 1992). Using the proposed Spectrum of Pro-Activity/ Rate of Environmental Change model, it is propositioned that companies which operate in relatively stable environments, which have a strategy of low pro-activity to that environment (Defenders), are likely to adopt a simple "mechanistic" (Burns and Stalker, 1961), centralised functional/line authority structure (Lawrence and Lorsch, 1967; Duncan, 1972; Miles and Snow, 1978; Govindarajan, 1986) with few overlaps (Goold and Campbell, 1987c). For foreign operations the Defender company is likely to adopt an international division structure where the degree of foreign sales is low and an area division structure when the degree of foreign manufacturing increases such that this structure is inefficient (Egelhoff 1988). The literature suggests that this form of structure is the most efficient in terms of cost whilst at the same time promoting the flow of the required costing information (Galbraith, 1969, 1973, 1977; Galbraith and Nathanson, 1979; Egelhoff, 1982). Companies which operate in relatively dynamic environments which seek to be pro-active (Innovators) will tend to adopt a complex "organic" (Burns and Stalker, 1961), decentralised product/market focused structure (Lawrence and Lorsch, 1967; Duncan, 1972; Miles and Snow, 1978; Govindarajan, 1986) with interdependencies requiring central co-ordination (Goold and Campbell, 1987c). For foreign operations the companies will tend to adopt a product/market or matrix structure (Egelhoff 1988). The literature suggests that this form of structure will promote the flow of product and market information, the cost of operating the structure being secondary to the need to be responsive to the business environment (Galbraith, 1969, 1973, 1977; Galbraith and Nathanson, 1979; Egelhoff, 1982). Companies which operate in less active markets than the Innovators and which seek to be less pro-active (Adaptors) will tend to adopt a mixed form of structure which allows tight control from the centre to the divisions but which allows flexibility within the divisions. For foreign operations the company will tend towards the international division structure where the degree of foreign product diversity is low, this fitting into the overall divisional structure. As the degree of foreign product diversity increases the company will change to either a product division structure or some form of matrix structure (Egelhoff 1988). The literature suggests that this form of structure provides a balance between cost and information processing requirements (Galbraith, 1969, 1973, 1977; Galbraith and Nathanson, 1979; Egelhoff, 1982). These various aspects are summarised in Table 3.1.

The various dimensions which relate business pro-activity, environmental dynamics and organisational structure suggested by the literature are incorporated into the proposed model (Figure 3.1). This should not be seen as a static model but one which attempts to incorporate the dynamic nature of the business environment and the responsiveness of companies.

3.2.3. Strategic Planning

In relation to strategic planning, it is propositioned that Innovators, who operate in rapidly changing environments and who seek to be pro-active, will tend to use bottom/up planning with fairly short time horizons, frequent reviews, but with long term strategic objectives (Miles and Snow, 1978; Lorange, 1979; Simons, 1987; Kukalis, 1991). The planning system will tend to be complete and extensive in scope in order to provide an integrative mechanism to co-ordinate the disparate parts of the organisation, and that co-ordination may be through a central planning department (Lindsay and Rue, 1980; Armstrong, 1982; Fredrickson, 1984; Fredrickson and Mitchell, 1984). It is propositioned that Adaptors will use both a top-down and bottom-up modes, the centre setting overall objectives for the divisions, and the divisions adopting a bottom up mode with their subsidiaries (Miles and Snow, 1978; Lorange, 1979; Simons, 1987; Kukalis, 1991). That the plans will be reviewed less frequently than those of the Innovators but will have a longer timescale due to the more stable environment, and that co-ordination may be through a central planning department (Lindsay and Rue, 1980; Armstrong, 1982). It is propositioned that Defenders may make use of strategic planning to communicate from the top down the goals of the top management, but that such goals will tend to be of a financial nature rather than strategic and that annual plans will be of more importance for control purposes (Miles and Snow, 1978; Lorange, 1979; Simons, 1987). These various aspects are summarised in Table 3.1.

The various dimensions which relate business pro-activity, environmental dynamics and strategic planning suggested by the literature are incorporated into the proposed model (Figure 3.1).

3.2.4. Control Systems

It is propositioned that the strategy adopted by a company is a major determinant of the control systems used. It is propositioned that Innovators will emphasise such performance measure as new product development, sales volume of products, market penetration, sales growth, with profitability and financial stability having less importance (Miles and Snow, 1978; Kamm, 1980; Simons, 1987, 1990; Dent, 1990). Measures will tend to be qualitative rather than quantitative and be long term in nature (Simons, 1990; Goold and Campbell, 1987c). It is propositioned that Defenders will emphasis cost control, productivity, profitability, financial stability and market share (Miles and Snow, 1978; Kamm, 1980; Simons, 1987, 1990; Dent, 1990). Measures will tend to be quantitative rather than qualitative and be short term in nature (Simons, 1990; Goold and Campbell, 1987c). It is propositioned that Adaptors will seek a balance between these two by measuring their performance in terms of both the market and the profitability of products (Simons, 1990). Financial performance in terms of profitability and financial stability will also be important (Goold and Campbell, 1987c). Thus measures will be both qualitative and quantitative, the company seeking to balance short and longer term performance (Simons, 1990). These various aspects are summarised in Table 3.1.

The various dimensions which relate business pro-activity, environmental dynamics and control systems suggested by the literature are incorporated into a summary diagram of the proposed model (Figure 3.1). This will be used in the subsequent analysis to "pattern match" the company attributes to the proposed model.

Table 3.1 Strategic Type Characteristic: Summary

Strategic Types		
Innovators	Adaptors	Defenders
Organisational Structure		
Decentralised.	Balance between centralised and decentralised.	Centralised.
Product and/or Market focused. Strong integrating/ coordinating mechanisms.	Staff dominated. Strong integrating/ coordinating mechanisms.	Functional/Line organisation with defined responsibilities. Overlaps discouraged.
Complex/ "organic"		Simple/ "mechanistic"
Foreign Operations: Product/Market, or Matrix (higher foreign manufacturing)	Foreign Operations: International Division (low foreign product diversity), Product Division or Matrix (higher foreign product diversity)	Foreign Operations: International Division structure (low foreign sales), or Area Division structure (higher foreign manufacturing)
Strategic Planning		
Bottom-up, short time horizons, frequent reviews, long term strategic objectives.	Top-down/ bottom-up, less frequent reviews, longer time scale.	Top-down, financial rather than strategic goals, irregular reviews of strategy.
Complete and extensive planning system: centralised planning department.	Less intensive planning system: possible central planning department.	Financial control dominated: concentration on annual budgets.
Centre coordinates strategy.	Business units set strategy. Some central coordination.	Business units set own strategy.
Strategic, flexible, program orientated.	Strategic, comprehensive with incremental changes.	Financial orientation.
Selective focus on main issues.	Comprehensive annual review with each business.	Review of annual budget only.
Control Systems		
External focus Market orientated	Focus on market and product profitability.	Internal focus. Tight cost control.
Strategic rather than financial goals set by centre. Qualitative rather than quantitative performance measures.	Short and long term performance measures. Qualitative and quantitative performance measures.	Financial rather than strategic goals set by centre. Quantitative performance measures.
Emphasis on long term subjective performance measures. Informal rather than formal.	Emphasis on long term performance whilst keeping within short term financial targets.	Intensive monitoring of short term performance against budget. Centralised and formal.

Figure 3.1 Proposed Model of Strategic Types and Control Mechanisms

	Innovators	Adaptors	Defenders
Degree of Pro-Activity	High		Low
Environmental Change	Dynamic		Static
Organisational Structure	Decentralised Product/market "Organic"		Centralised Functional "Mechanistic"
Strategic Planning	Bottom-up Extensive		Top-down Little used
Control Systems	External focus Long term strategic objectives Strategic monitoring		Internal focus Short term financial objectives Tight financial control

Chapter 4: Research Design

4.1. Introduction

This chapter provides a rationale for the research design used: the choice of methodology; the process and criteria for the selection of the cases; the choice of respondents; the actual conduct of the research; issues of validation, replicability and bias, and the resulting limitations of the research findings. The first part of the chapter discusses the reasons for the choice of a qualitative methodology and the case study method. It starts by discussing the philosophical assumptions which underlie much social science research and, in particular, that which uses qualitative rather than quantitative methods. It next discusses the use of the case study method within social science research and, in particular, the use of multiple case studies. The final part of the chapter examines the actual conduct of the research including the difficulties encountered and the potential problems of reliability, replicability and bias inherent in the resultant data and subsequent analysis. The chapter concludes by discussing the limitations and consequent qualification of the research findings

4.2. Methodology

Without wishing to become too simplistic, it is possible to identify two main philosophical traditions within many of the social sciences. They have been variously labelled but will be termed positivistic and humanistic in this brief summary. A central tenet of the positivist position is the view that the study of society and human behaviour should be quantifiable in the mode of the natural sciences. The investigator should therefore look to the natural sciences for a model of theory construction and precision. The view is taken that the social and natural worlds conform to certain fixed and unalterable laws in an endless chain of causation (Hughes, 1976) and that the major goal of scientific research is to establish causal laws that enable us to predict and explain specific phenomena (Labowitz and Hagedorn, 1971). This requires us to formulate and empirically test explanatory and predictive theories using rigorous, objectives measures, usually of a quantitative nature. Positivism draws on the assumptions of a fact-value distinction to stretch the methods of the natural sciences to fit the social sciences. Thus, appropriate methods are primarily those which test theories and hypotheses e.g. hypothesis testing using survey questionnaires and statistical analysis. Positivism has the following tenets: that the values and beliefs of researchers can be put aside when they set out to discover the facts about the world; that social phenomena are determined by the operation of causal laws; and that social facts can be explained by deducing them from causal laws (Llewellyn, 1992). Such a positivist philosophy does not easily admit the validity of applied qualitative research which seeks to provide explanations of social phenomena from specific cases rather than from statistical surveys.

The humanistic view is that the subject matter of social sciences is intrinsically different from that of the natural sciences and that it is therefore inappropriate to use its methods. Human beings are not particles acted upon by exigenious forces; they are purposeful, goal-seeking, feeling, meaning-attributing and meaning-responding creatures (Hughes, 1976). An adequate description of the social world, unlike that of the natural world, necessitates the researcher "getting inside" the objects of his study so that he understands and knows them as subjects (Walker, 1986). Since the researcher is engaged in the social process, the knowledge and insights gained by the researcher are subjective rather than objective, thus the objectivity demanded by the positivist model is impossible to achieve and only a relativistic interpretation of the phenomenon is possible. As Hughes (1980) notes: far from being a passive reporter, the researcher is an active agent in the construction of the world through the specific ideas and themes incorporated in the relevant form of knowledge. Such a view allows multiple interpretations of the same observed phenomena and multiple theoretical perspectives of the same objects. A theory's validity is tested by how well it explains the current observed phenomena and how well it can account for alternative states of that phenomena. An exclusive position cannot be adopted, and therefore a theory's validity is not refuted by an alternative theory but rather complemented by it (Denzin, 1970). Kaplan (1986) observes that it may be implausible for us to expect theories of management process ever to reach the stage of those in the natural sciences where a small number of experiments can disprove or overthrow a theory. Because of the complexity and ambiguity of social/managerial phenomena, it seems more likely that we will continue to have competing theories co-existing, as a function of researchers' varying perceptions of the critical issues in the phenomena observed.

4.3. Qualitative Research

In attempting to understand human behaviour, Walker (1986) observes, it is necessary to discover the actors' perceptions of events and to ask how these relate to their behaviour. Adequate descriptions of the social world, unlike those of the natural world, necessitates the researcher "getting inside" the objects of his study so that he understands and knows them as subjects. A quantitative survey method was not chosen as much of this richness would not have been discovered, only tendencies within the sample. It would have given a goodness of fit to the surveyed companies but not the reasons for particular variations from the model. One of the objectives of the research was to determine what things "exist" and the relationships between them rather than to determine how many such things there were (Hedges, 1981).

Four main methods of qualitative research have been identified (Walker, 1986): depth interviews where the researcher encourages the informant to relate, in their own terms, experiences and attitudes that are relevant to the research problem; group interviews where a small number of people are facilitated to exchange their views on the subject of the research; participant observation where the researcher seeks to study people in their "natural" environment; and, projective techniques where the researcher uses relatively unstructured stimuli to observe how the respondent structures his perceptions of the world and his response to it.

Group interviews were not used due to the difficulty of access, although it is recognised that this method may have overcome the problem of the inherent personal bias of the interviewees. A number of different managers were interviewed and their perceptions compared in order to minimise this problem. Participant observation was not possible due to the confidentiality of the subject matter and the difficulty of prolonged access, although it is recognised that much "richer" data on the process of the decisions would have been gained from its use. Projective techniques were not used as the focus of the research was control systems rather than social perceptions. Such techniques would be useful if the ideas about environmental filtering were to be focused upon and the participants perceptions as regards "reality" were being studied. As the purpose of this research was to provide explanations for the observed phenomena the depth interview was used as it provides "the opportunity for the researcher to probe deeply, to uncover new clues, to open up new dimensions of a problem and to secure vivid, accurate, inclusive accounts that are based on personal experience" (Burgess, 1982a).

4.4. The Case Study Method

In recent years there has been a growing recognition that the case study approach can yield fruitful results (Diesing 1972; Yin 1981, 1984; Kaplan, 1983, 1984, 1986; Mohr 1985; and Scapens 1990). It should be noted that case studies are a research method and not a methodology (Scapens, 1990). Methodology is the epistemological framework for the research whilst methods are the techniques for doing the research (Bryman 1984). Methodology is fundamental in the sense of being dependent on the values and beliefs of those engaged in the research process (Llewellyn 1992). As noted above, the beliefs of the researcher are humanistic rather than that positivistic, it being held that since the researcher is engaged in the social process whilst conduction the interviews, the knowledge and insights gained are subjective rather than objective, and thus that the objectivity demanded by the positivist model is impossible to achieve i.e. the interviewer cannot stand back from being human to impartially observe the phenomena.

Yin (1981) states that as a research method, the distinguishing characteristic of the case study is that it attempts to examine (a) a contemporary phenomenon in its real- life context, especially when (b) the boundaries between phenomenon and context are not clearly evident i.e. the control systems used by a company cannot be divorced from the company itself operating within its environment. He comments that experiments differ from this in that they deliberately divorce a phenomenon from its context, and histories differ in that they are limited to phenomena of the past, where relevant informants may be unavailable for interview and relevant events unavailable for direct observation. In general, case studies are the preferred strategy when "how" or "why" questions are being posed, when the investigator has little control over events, and when the focus is on contemporary phenomenon within some real life context. The adoption of the case study method is therefore appropriate for this study as the main questions are concerned with how and why companies adopt to changes in the business environment. The subject of the study, namely multinational companies, is both contemporary and concerned with real events over which the investigator had little or no control.

Case studies can be used in a variety of ways (Scapens 1990) :

1 Descriptive Case Studies which describe systems, techniques and procedures used in practice. The research objective is to describe current practice.
2 Illustrative Case Studies which attempt to illustrate new and possibly innovative practices developed by particular companies.
3 Experimental Case Studies which are used to examine the possible difficulties of implementing new procedures and techniques.
4 Exploratory Case Studies which can be used to explore reasons for particular practice. They are used for ideas generation hypothesis formulation prior to rigorous empirical testing.
5 Explanatory Case Studies which are used to explain the reasons for current practice. The theory is used to understand and explain the specific rather than to produce generalisations. If available theories do not provide explanations it may be necessary to modify them.

In this research, case studies are used in an explanatory way to interpret the reasons why companies adopt particular strategies and control systems. The model developed from the theory is used to understand and explain the specific cases rather than to produce generalisations. The use of such a model is one way of structuring the observed phenomena and creating order out of seeming chaos. A model is necessarily a simplification of reality due to the inherent complexity of the social world. It therefore cannot model all the forces acting upon a system but by concentrating upon the major components it enables other factors to be observed. The company's systems and their interactions can be observed and structured using the model and the exceptions noted. Where the model does not fit the particular case an explanations has to be found and, where appropriate, the model modified. Through this process the model becomes a more refined tool of analysis.

Mohr (1985) observes that the case study has two salient characteristics. It is marked: by depth or richness of detail, and by it consisting in a sample of just one subject i.e. the exact conditions cannot be replicated as in a scientific experiment. He comments that the most common criticism of case studies is that you cannot generalise from a sample of one; that you cannot derive an explanatory theory which predicts the behaviour of a phenomenon from just one observation. In fact, he argues, it is not possible to provide stable explanations or theories in the social sciences as one can in the natural sciences because we are dealing with "motivational behaviours" rather than cause and effect relationships, and that although some motives are critical to the explanation of any individual instance, no single, closed set of motives can be a stable or general explanation for a behaviour under all circumstances. Thus, as the size of the sample increases the degree to which it can be generalised does not necessarily increase. This does not preclude the use of multiple case studies to test an explanatory theory but, in this case, the theory is used to provide an explanation for each separate case. In this study a model is used to highlight these specific behaviours so that explanations can be sought. Such specific behaviours cannot then be generalised to all companies although broad patterns can sometimes be observed.

Rather than trying to derive causal laws, an alternative is to look for limited associations between various aspects of the observed phenomena. The aim of such associational research is to predict or explain (understand) the variables in some limited population and how they fit together functionally, at least some of the time (Mohr, 1985). In support of this, Kaplan (1986) comments that in the social sciences our knowledge may be restricted to knowledge about associations and correlations, and we may not be able to reach conclusions which are able to be generalised. Unlike the natural sciences, where the underlying phenomena seem quite stationary, organisations and management phenomena must continually adapt to changing circumstances. Yin (1981) remarks that case studies, like experiments, are able to be generalised to theoretical propositions and not to populations or universes. The case study, like the experiment, does not represent a "sample". The investigator's goal is to expand and generalise theories (analytical generalisations) and not to enumerate frequencies (statistical generalisations).

4.5. Case Study Design

A primary distinction in designing case studies is between single and multiple case design (Yin 1981). The single case study design is seen as appropriate when: the single case represents a critical case; when the case is an extreme or unique case; or when the case is revelatory. Where this is not the case a multiple case design is more appropriate, the cases being considered as one would consider multiple experiments and a replication logic followed. In this research a multiple case study design was used as the proposed model has a number of dimensions e.g. environmental dynamism, business pro-activity, which could not be explored using a single critical, extreme or unique case. In the multiple case study design each case must be carefully selected so that either it predicts similar results (a literal replication) or it produces contrary results but for predictable reasons (a theoretical replication). The present study uses a multiple case study design with a selection of cases which allow both literal and theoretical replication, the purpose being to investigate the different components of the model.

Yin (1981) observes that there are two potential approaches to the analysis of the case studies: case survey and case comparison. The case survey approach uses a large number of cases to detect patterns, often using quantitative techniques. The alternative method of case comparison is used when the number of cases is small. It can be used to test theories derived from prior research against the current observed phenomena. The research attempts to provide explanations for any differences between the existing theory and the observations made and to provide modifications to the theory which provide a better explanation of the total phenomena. This is the situation in the current study. A similar use for case studies is given by Bonoma and Wong (1985) who use a four stage model: drift, design, prediction and disconfirmation. Drift is the initial exploration and clarification of the subject area. The researcher may use case studies to learn concepts and to integrate existing literature, prior concepts of the phenomena and observed practice (Appendix B contains such an exploratory study using a database of fifteen case studies of multinational companies derived from prior research). The design stage is where the researcher derives a tentative model or theory to explain the observations collected to date (The proposed model of Business Pro-activity/Environmental Change). The prediction stage is where these tentative theories are tested in new field sites (The model has then been used to provide an explanation for the behaviour of four companies which have been studied in more detail). This allows the tentative model to be modified and extended to fit the new observations. They permit an exploration of whether industry or situation specific variables are relevant i.e. to highlight specific exceptional behaviours so that explanations can be sought.. Disconfirmation is the use of extreme cases to set boundaries to the theory e.g. testing a theory derived for multinational companies on smaller companies. The purpose of the disconfirmation stage of research is therefore to determine and delineate the domain of applicability of theories developed to explain phenomena observed in prior field research. The present study was limited to multinational companies based in the UK. Further research will be required to test the usefulness of the model in explaining the behaviour of non-UK based multinationals and additional company types.

4.6. Sample Selection

Walker (1986) comments that sample selection in qualitative research emerges from the objectives of the study and are modified by considerations governing choice of method and the scope of the study. It is purposive, so that rather than taking a random cross section of the population to be studied, a small number of the population are selected with specific characteristics, behaviour or experience in order to facilitate broad comparison between certain groups. Such a selection introduces bias into the data but such bias is unavoidable and must be borne in mind when the data is being interpreted and possible generalisations made. Kaplan (1986) comments that when selecting organisations for study, the researchers should not be interested in obtaining a randomly selected or "representative" set of firms. The goal for the research is not to document "average" practice, but rather to learn about innovative, leading-edge practice. In this study four companies have been selected for comparison with the proposed model. Two of them have changed strategy as a result of changes in their environment and two of them have maintained their strategy. The business environments in which the companies operate range from relatively low rate of change to rapid change. The aim has been to test the usefulness of the model in explaining the reasons why companies adopt particular strategies and control systems in both static and dynamic situations.

4.7. Case Analysis

The actual analysis of the case studies has followed a "pattern matching" approach similar to that used by Campbell (1975) where several pieces of information from the same case are related to the theoretical propositions. More specifically, a non-equivalent dependent variable design (Cook and Campbell, 1979) has been used, where the proposed model's predictions regarding several dependent variables has been analysed against the particular cases. This enables a check to be made on the internal validity of each of the cases and on the external validity of the proposed model (Yin, 1981). Yin observes that in a study that has specified non-equivalent dependent variables, if the results are as predicted, a solid conclusion can be drawn about the validity of the model used. If the model predicts different values for these non-equivalent dependent variable under different circumstances then an even stronger case can be made (a theoretical replication). The present study has such a model which predicts different patterns for different business environments. Yin (1981) comments that one problem with this method is the determination of criteria for interpreting a study's findings. Campbell in his study did not do any statistical test to make the comparison but relied on a simple "eyeball" comparison, his patterns being sufficiently contrasting. Yin observes that statistical techniques are likely to be irrelevant because none of the variables in the pattern have a "variance", each essentially representing a single data point. In the present study a chart is used to enable visual analysis of the case studies against the expected values. It is acknowledged that this lack of precision may allow for some interpretive discretion on the part of the investigator, who may be overly restrictive in claiming that a pattern has been violated or overly lenient in deciding that a pattern has been matched. As a consequence, the model has been formulated using "bold" patterns rather than subtle ones in order that gross matches and mismatches can be observed and an "eyeballing" technique give sufficiently convincing evidence to draw conclusions (Yin, 1981).

4.8. Research Design: Quality Criteria

In designing and conducting any research the quality of the research and the relevance of the results depends very much upon the quality of the research design. Four criteria are given by Yin (1981) to judge the quality of a research design:

- **Construct validity:** establishing correct operational measures for the concepts being studied;
- **Internal validity:** establishing a causal relationship, whereby certain conditions are shown to lead to other conditions, as distinguished from spurious relationships;
- **External validity:** establishing the domain to which a study's findings can be generalised; and
- **Reliability:** demonstrating that the operations of a study - such as the data collection procedures - can be repeated, with the same results.

These will be used to identify the tactics which have been applied in the present study to deal with these tests.

4.8.1. Construct validity

The first issue to be addressed is the operationalisation of the main construct of the research i.e. environmental dynamism. Previous attempts to measure this can be divided into two main categories: objective measures of environmental uncertainty and subjective measures of perceived environmental uncertainty.

Objective measures tend to be based upon sales volatility, for example McKee et al (1989) used the coefficient of variation of first differences of the total market sales to measure market volatility. Although this provides an objective measure of market change it does not measure the qualitative aspects of market volatility, such as changes in customer tastes. Gordon and Narayanan (1984) argue that it is the managers' perception of the environmental uncertainty which is the major determinant of strategic choice rather than the actual environment, "that the structuring actions an organisation takes in responding to its environment are more consistent with perceptions of the environment than with more objective indicators of the environment." This view is consistent with the concept of a paradigm through which an organisation "filters" its view of reality, adjusting its strategy to the perceived environment rather than to the "real" environment. Attempts by researchers to correlate perceptions of environmental uncertainty with actual environmental uncertainty have not proved successful (Tosi et al, 1973). As this research is concerned with the fit between a company's control systems and its perceived environment, the investigation was conducted using a measure of perceived environmental change.

A number of researchers have proposed measures of perceived environmental uncertainty. Grinyer et al (1980) developed five scales for environmental pressure or hostility perceived by interviewees: past competition, expected competition, need for new product innovation, rate of technological change and alternative supplies of raw materials. They found that the first two scales, past competition and expected competition were highly correlated, as were the need for new product innovation and the perceived rate of technological change. Slevin and Covin (1990) used a scale ranging from hostile to benign to subjectively rank companies in their study. They describe a hostile environment as one characterised by precarious industry settings, intense competition, harsh, overwhelming business climates, and the relative lack of exploitable opportunities. Non-hostile or benign environments, on the other hand, were characterised by their overall level of munificence and richness in investment and market opportunities. Ansoff and Sullivan (1993) describe a five point scale of environmental turbulence using four factors: complexity of events, familiarity of events, rapidity of change and visibility of the future. They suggest that the manager select the point on the scale for each of the factors which best describes their business environment and then average them to find their level of environmental turbulence.

The use of such scales implies a formal interview structure using a questionnaire rather than, as in the present study, a semi-structured interview technique where the respondent is encouraged to express ideas and concepts in their own words. In the present study a number of subjective measures were chosen to judge perceived environmental uncertainty: number of competitors, degree of competition, changes in customer tastes, maturity of market and products, product innovation, technological change, general economic climate, Government legislation. The interviewees were asked about each of these and their comments noted. The interviewer then made a judgement, based upon these measures, about the rate of change of the business environment and related this back to the interviewee for verification. An assessment was also made as to the constancy of this environmental dynamic over the previous five year period. This was also verified with the interviewee.

In order to further minimise the effect of subjective judgements by the interviewer, multiple sources of evidence were used, i.e. multiple interviews, promotional literature, standard report forms, internal correspondence, published accounts and press reports. In addition, the draft case studies were reviewed by the key informants.

4.8.2. Internal validity

In order to accomplish internal validity and eliminate as far as possible spurious effects, the tactic of pattern matching was used, comparing the pattern predicted by a model derived from prior research to that observed in each case. According to Cook and Campbell (1979), an experiment or quasi-experiment may have multiple dependent variables i.e. a variety of outcome. If, for each outcome, the initially predicted values are found, and at the same time alternative patterns of predicted values are not found, strong causal inferences can be made.

In order to eliminate, as far as possible, erroneous inferences by the interviewer, the draft interviews were validated by the interviewees. In addition, the final drafts and comments were discussed with the key respondents, in particular the pattern matching of the company to the proposed model.

4.8.3. External validity

A replication logic was used to increase the external validity of the research design. Each case was selected so that it either predicted similar results (literal replication) or contrary results but for predictable reasons (theoretical replication). Yin (1981) notes that this replication logic is the same as that which underlies the use of experiments and allows scientists to generalise from one experiment to another.

The choice of four multinational companies limits the domain of applicability of the present study to such companies. Further research would be required to test its possible extension to different company types.

4.8.4. Reliability

Yin (1981) states that the objective of this test is to ensure that if a later investigator followed exactly the same procedure as described by an earlier investigator and conducted the same case studies all over again, the later investigator would arrive at the same findings and conclusions. The difficulty in this type of case study research is that interviews are conducted at a specific point in time, with responses based upon the experience of the interviewee (and to a lesser extent the interviewer) at that point in time. If the same interview were conducted a year later, the perceptions of the interviewee (and interviewer) might well have changed due to subsequent events. This is another reason for using multiple sources of evidence. Also, the holders of particular senior positions within the company might have changed, thus making repetition difficult. A form of repetition could however be undertaken using the tape recorded interviews. A later investigator could use these to re-construct the cases and to cross check these with the written forms of evidence.

The main method of ensuring reliability in this research was to repeatedly check the draft case studies with the respondents and to cross check the findings with other sources of evidence.

4.9. Conduct of the Research

In this section the actual conduct of the research is described as a number of phases. These should not be thought of as distinct with no overlap, there having been considerable interaction between the theoretical and empirical investigations and much reworking in the light of new knowledge and understanding.

4.9.1. Initial Analysis

A database of fifteen case studies of multinational companies derived from a previous research study into performance measurement was used to explore tentative relationships between strategy and strategic control. The analysis revealed a possible relationship between the Strategic Typology of Porter (1980, 1985) and the Strategic Control Styles of Goold and Campbell (1987a,b,c, 1988). Tentative findings were presented as a conference paper at two conferences (see appendix B). Feedback from these conferences proved invaluable in the subsequent research.

4.9.2. Literature Survey

These initial findings indicated possible links between the strategy adopted by a company and its use of control systems, in particular those of organisational structure, planning systems and performance measurement. A literature survey was therefore undertaken to reveal possible theoretical and empirical links between the strategy adopted by a company and its use of these three control mechanisms. Chapter 2 gives a review of this literature and its use to develop a tentative explanatory model.

4.9.3. Company Selection

The initial cases could not be used to test the validity of this model due to the limitations of the data, the focus of the initial research being on performance measurement rather than strategy. It was therefore decided to conduct further research into a small number of organisations selected on the basis of their apparent fit to the main dimension of the model i.e. rate of change of the business environment. The model is not static but one which seeks to interpret the use of control systems to enable a company to both respond to and promote change. Companies were therefore sought which fell into one of the following four categories:

1 Low rate of environmental change - little increase in the rate of change over the past five to ten years

2 Initial low rate of environmental change - increased rate of change over the past five to ten years

3 High rate of environmental change - little decrease in the rate of change over the past five to ten years

4 Initial high rate of environmental change - decreased rate of change over the past five to ten years

i.e. two relatively static cases and two dynamic cases. The purpose being to identify whether a company's use of its control systems differs when it is in a "steady state" (little change in the rate of change of its environment) to its use when it is operating in a dynamic environment (rate of change increasing or decreasing).

Bryman (1989) notes that one of the most vexed areas for many researchers is quite simply getting into organisations and the author's experience was supportive of this. This was found to be particularly the case when the research is concerned with strategy and therefore involves seeking interviews with senior executives. The author was fortunate in having initial access to a number of organisations due either to previous research or to the supervision of placement students within those organisations. An initial investigation was conducted of these potential organisations using prior knowledge, published accounts and information from Textline and Datastream, and four illustrative cases selected. This was not a random selection but was purposeful (Walker, 1986), seeking to match the characteristics of the companies and their business environments to the four categories described above. Patton (1990) notes that quantitative research requires a random sample which is statistically representative of the population whereas qualitative research requires a purposeful selection of cases which are information rich for study in depth. It is recognised that such a selection introduces bias into the data but such bias in unavoidable and will be taken into account when the data is being interpreted and possible generalisations made. It was not possible to gain access to a company which fell into the fourth category i.e. initial high rate of environmental change - decreased rate of change over the past five to ten years, so two cases were selected in the second category i.e. initial low rate of environmental change - increased rate of change over the past five to ten years, one which had responded to an increased rate of change and one which had actively sought to promote that change. The four cases were therefore selected to illustrate both static and dynamic situations:

- **company 1** - business environment changing from low rate of change to high rate of change

- **company 2** - business environment changing from low rate of change to a medium rate of change
- **company 3** - business environment subject to a low rate of change
- **company 4** - business environment subject to a high rate of change

Such a selection is described by Patton (1990) as theory based or operational construct sampling, the researcher sampling incidents, slices of life, time periods, or people on the basis of their potential manifestation or representation of important theoretical constructs, the sample becoming, by definition, representative of the phenomenon of interest. Cook et al (1985) notes that for sampling operational instances of constructs, there is also no concrete target population. Mostly, therefore, we are forced to select on a purposive basis those particular instances of a construct that past validity studies, conventional practice, individual intuition, or consultation with critically minded persons suggest offer the closest correspondence to the construct of interest. Operational construct sampling simply means that one samples for study real-world examples of the construct in which one is interested.

Note that the cases were selected on the basis of how well they appeared to fit the main dimensions of the model i.e. rate of change of the environment/ degree of proactivity without regard to the control mechanisms used i.e. organisational structure, planning and control systems. There was no pre-selection to obtain a good fit of the data to the model.

4.9.4. Data Collection

Due to the author's prior research and contact through placement students it was possible to arrange initial interviews with senior executives in the selected companies. This initial interview was either conducted with the company's chief executive or with the senior financial officer. A further interview was arranged in all cases with the executive responsible for corporate planning. It is recognised that such a selection may well have introduced bias as to the researchers view of the company's strategy and use of its control systems i.e. a financial bias. This potential problem will be addressed later.

Patton (1990) notes that qualitative methods consist of three kinds of data collection: (1) in depth, open ended interviews; (2) direct observation; and (3) written documents. It was decided to collect data for the cases by conducting open ended interviews supplemented by written documents. Direct observation was not possible due to the sensitivity of the subject i.e. it was not possible to gain access to board meetings. Patton (1990) writes that one important way to strengthen a study design is through triangulation, or the combination of methodologies in the study of the same phenomena. Denzin (1978) has identified four basic types of triangulation: (1) data triangulation - the use of a variety of data sources in a study; (2) investigator triangulation - the use of several different researchers or evaluators; (3) theory triangulation - the use of multiple perspectives to interpret a single set of data; and (4) methodological triangulation - the use of multiple methods to study a single problem or program. In this study data triangulation was provided by conducting interviews with more than one executive and cross checking these with written documents, and theory triangulation through the literature review. At this stage of the research investigator triangulation and methodological triangulation were not feasible due to cost and time constraints. These issues will be further considered in the final chapter.

Patton (1990) describes three basic approaches to collecting qualitative data through open ended interviews: (1) the informal conversational interview; (2) the general interview guide approach; and (3) the standardised open ended interview. Due to the time limitations on the interview (usually one to two hours) the informal conversational interview could not be used. It was decided not to use the standardised open ended interview using a detailed questionnaire as this tends to limit the data collection to that anticipated by the interviewer and prevents interesting topics being pursued further. The interviews therefore followed a general interview guide approach using an aide memoir (appendix A) designed to ensure that similar questions were asked of each respondent but which allowed the interviewer to clarify or follow up interesting ideas introduced by the informant i.e. they were semi-structured, focused, but open ended. Where a respondent raised issues of general importance to the study these were added to the aide memoir for subsequent interviews. Whenever possible the previous respondents were asked similar questions at the case validation phase. A tape recorder was used to record the interview so as not to interrupt the flow of the interview and to provide a source of direct quotations. Patton (1990) comments that open ended questions permit one to understand the world as seen by the respondents. The purpose of gathering responses to open ended questions is to enable the researcher to understand and capture the points of view of other people without predetermining those points of view through prior selection of questionnaire categories. The main subject areas were covered in each interview but not in any particular order and not always to the same depth. These interviews were supplemented with evidence available from a number of sources: promotional literature, standard report forms, internal correspondence, published accounts, and press reports.

4.9.5. Case Study Construction

These interviews were written up using the structure of the aide memoir. As a means of validating the data these documents were sent to the respondents with a request to check them for errors of fact and interpretation. This usually elicited further comment either in writing or, more frequently, by telephone. Using the data from the respondents within a company and available written information, often supplied by the respondents, a case study of each company was constructed. Where discrepancies were found between the respondents or the respondents and written information, clarification was sought with one or more of the respondents. In all such cases the discrepancies were resolved to the researcher's satisfaction, the main differences being ones of emphasis and individual perspective. Once the four case studies were constructed an initial comparison was made between companies to highlight where additional information was required. Where this was found to be the case the respective respondents were contacted again. The aim was to construct cases which were as factual as possible and which eliminated, as far as possible, the inherent bias if only one source of information had been used. In particular, the bias of individual respondents whose perspective and perceptions of the situation are subject to distortion due to personal bias, anger, anxiety, politics, and simple lack of awareness (Patton, 1990).

4.9.6. Qualitative Analysis

The actual analysis of the case studies followed a "pattern matching" approach similar to that used by Campbell (1975) where several pieces of information from the same case were related to the theoretical propositions. More specifically, a non-equivalent dependent variable design (Cook and Campbell, 1979) was used, where the proposed model's predictions regarding several dependent variables was analysed against the particular cases. This was to enable a check to be made on the internal validity of each of the cases and on the external validity of the proposed model.

Each of the cases was analysed using the proposed model, firstly by comparing the business environment and business strategy adopted by the company with that suggested by the model. No objective measures of the rate of change of the business environment were used but the subjective assessment of the respondents as to the degree of change experienced over the past five to ten years. Subsequent discussion with two of the respondents confirmed the researcher's categorisation in these cases. Following this, the various control mechanisms used in practice were compared with those expected from the model. Where the actual practice differed from that suggested by the model, possible explanations were sought, sometimes through a further review of the relevant literature. The details of this comparison and possible explanations were then written into the cases.

Following this individual case comparison with the theoretical model, a cross case comparison was conducted to find any similarities and contrasts between the cases. The choice of the cases was particularly relevant here as the similarities of companies operating in very different business environments could be highlighted i.e. important shared patterns that derive their significance from having emerged out of heterogeneity (Patton, 1990).

For each of the cases the key respondents were sent a copy of the cases study, the analysis, and a brief description of the proposed model and asked for comments. Those comments which were received (two of the cases) have been incorporated within the text. Both respondents confirmed the researchers view as to the relative degree of environmental change which the company faced and its response to that change. This offered some validation of the researcher's operationalisation of the main construct of the model i.e rate of change of the environment/degree of proactivity.

4.9.7. Limitations

All types of research involves choices, in particular, a choice of the methodology to be adopted and the method to be used. Inherent in the choice of a particular method are the limitations of that method and consequent need to qualify the research findings. The researcher seeks to choose an appropriate method which limits the need for such qualifications and hence the usefulness of the research finding.

The choice of a qualitative rather than quantitative research methodology sets limits on the ability to generalise the research findings but not necessarily on the usefulness of the theoretical model developed. Qualitative research requires a purposeful selection of cases which are information rich for study in depth. It is recognised that such a selection introduces bias into the data but such bias in unavoidable and has been taken into account when the data was being interpreted and possible generalisations made e.g. range of applicability of the model. In this research a theoretical model has been used to gain insight into the behaviour of four companies. The results cannot be generalised to infer that all companies will behave in this way, only that a comparison of an individual company with the model is likely to yield useful insights into its use of its strategic control systems.

Strict replication of the study would not be possible due to the ongoing changes within the companies which alter people's perceptions of past events and the changes in senior personnel who have different ideas and emphases. Replication is therefore only possible in terms of additional case studies and their analysis using the model. The reliability of the data used to construct the cases has been enhanced by constant checking with the respondents. It is recognised, however, that the analysis of the individual interviews and documents to construct the final case study can be regarded as a somewhat subjective process (Bailey, 1987). The use of more than one researcher would help to reduce this inherent subjectivity. The researcher sought to eliminate some of this bias by having the respondents from each of the companies check the final case study and analysis.

It is recognised that the choice of respondents within the four companies i.e. Chief Executive, Chief Financial Officer and Corporate Planning Executive may well have introduced bias into the cases, the emphasis of the company's strategy and its use of control systems being financially orientated. An attempt was made to address this potential problem by seeking an interview with the senior marketing executive of each company. An interview was conducted with the Marketing Director of Company 1 and the case study extended to include this information. Company 3 had no marketing executive at group level, the Strategic Planning Manager being responsible for all marketing issues. Companies 2 and 4 failed to respond. This financial bias is also reflected in the researcher's background which is Accounting. The researcher, either consciously or unconsciously, probably filtered responses to fit in with his bias. The use of more than one interviewer, preferable from another discipline e.g. Marketing, would have helped to overcome this, but this was not possible given the purpose of this particular research i.e. a Doctoral Thesis. The research, in its present form, is therefore biased towards a financial perspective and is therefore limited in its scope of application. It is recognised that in order to broaden its scope a more thorough review of the strategic marketing literature would be required together with the interviewing of marketing executives. This is included within the proposals for further research in the final chapter.

4.10. Summary

In this research, case studies are used in an explanatory way (Scapens, 1990) in order to understand the variables which affect strategy and strategic control and how these variables fit together functionally (Mohr, 1985). The method of case comparison (Yin 1981) is used to test theories derived from prior research against the current observed phenomena and to integrate existing literature. The theories are used to explain the observations, and the observations are used to modify the theory. The research attempts to provide explanations for any differences between the existing theory and the observations made, and to provide modifications to the theory which provide a better explanation of the total phenomena. The research takes a holistic approach (Scapens, 1990) based on the belief that social systems develop a characteristic wholeness or integrity and that it is inappropriate to study the individual parts taken out of context. The limitations of the current study have been recognised and the consequent need to qualify the research findings. Despite these qualifications, the research method adopted has yielded useful insights into the strategy adopted by companies and their choice of mechanisms to control those strategies.

Chapter 5: Analysis of Cases

5.1. Introduction

In this chapter the proposed model is used to analyse four companies and their responses to the business environment. Two of the selected companies have changed their strategies in response to changes in the rate of change of the business environment, whereas the other two have continued to adopt the same strategy in a business environment which has retained the same relative rate of change. The model is used to gain insight into the strategies adopted and the control systems used to support the strategy, the aim being to test the usefulness or otherwise of the proposed model in providing an explanation for the relationship between these variables which are found in practice. The first two studies also highlight the dynamic nature of this relationship and the effect of organisational inertia on the rate of change. The aim in making this selection was to test the usefulness of the model in explaining the reasons why companies adopt particular strategies and control systems in both static and dynamic situations.

As explained in the previous chapter, the actual analysis of the case studies follows a "pattern matching" approach where several pieces of information from the same case are related to the theoretical propositions. A non-equivalent dependent variable design (Cook and Campbell, 1979) is used, where the proposed model's predictions regarding several dependent variables is analysed against the particular cases. The purpose of this is to enabled a check to be made on the internal validity of each of the cases and on the external validity of the proposed model.

5.2. Company 1

The company was founded in the last century and has grown to its present size through organic growth and acquisition. It was owned by descendants of the original founders until its merger with a public company over a decade ago, although the original family still have substantial holdings in the company and continue to have a major influence over its management style and culture.

In the most recent published accounts the company reported a turnover of approximately £3,000 million, net assets of £1,400 million, had 35,000 employees, and had spent £11 million on Research and Development.

5.2.1. Strategic Typology

Business Environment

The number of competitors has been fairly stable. A feature of the business is the small number of competitors, the three largest players accounting for over 90% of the market. The Marketing Director commented that, " This results in a very "rational" market without "silly" price wars." One of the major competitors has adopted a strategy of a small number of standard lines produced at lowest cost, high volume, with branding on individual products. The company, on the other hand, has adopted a strategy of innovation and variety, tending to compete on quality, branding the company name not individual products. Rather than gearing manufacturing to long runs of a standard product it has gone for flexibility and variety. The Marketing Director commented that the company expected that two out of three new products would fail. The flexibility of the manufacturing plant minimised the cost of failure.

Changes in consumer tastes have resulted in an increase in demand for the company's products and a need to respond to challenges. The overall market has been growing at approximately 10% per annum for the past ten years. One senior manager said that, "A strategy is something wrapped around an opportunity".

Using the proposed model, the rate of change of the business environment has increased gradually from being relatively low to being relatively high i.e. from there being little product innovation and changes in consumer tastes to there being a need for product innovation to maintain market position. This has been partly due to market forces but is also due to the company's decision to compete on quality and product innovation i.e. the company has promoted change.

Business Strategy

Since 1985 the strategy has been to focus on the core markets alongside a set of objectives designed to increase shareholder value: growth in earnings and capital value. Over a two year period the company divested itself of a number of operations reducing its previous five divisions to two. Commenting on this, one of the then senior executives said, "There would not have been a change in strategy had there not been a new chief executive. The world was changing but his predecessor would not have responded to the change." Thus a company may not respond to changes in its environment due to organisational inertia and it may need a change of senior management before the appropriate response can be made. This is consistent with the organisational change literature (e.g. Miller and Friesen, 1980, 1984) who argue that organisations delay adopting to environmental change until the magnitude of the change renders the opportunity costs of continuing the existing strategies greater than the cost of structural and strategic realignment. Such changes may not be welcomed by the existing holders of power (Bacharach and Lawler 1980; Pfeffer, 1981; Walsh et al, 1981) and it may require new leaders to bring new vision (Starbuck and Hedberg, 1977).

In the 1987 Annual Report the then Chairman wrote, "The strategy which led to the restructuring of the Group was based on a concentration on the Group's core markets and on its leading brands in those markets. It involved selling those businesses which were outside the two main streams and putting the resources released behind those international brands and markets which had the best growth prospective." In the 1987 Annual Report the Managing Director of one of the business streams wrote, "Over the past five years (company name) has introduced more successful new products by far than its competitors; and it is these new products which have broadened the market and driven sales forward. The strategy has been to give the consumer variety with excellence." In terms of the proposed model the company adopted a strategy of Innovation, seeking to anticipate changes in the business environment rather than purely responding to them: the company became one of the main promoters of change in the market.

In the 1990 Annual Report the Chairman wrote, "Our strategy remains to grow profitability, brand strength and volume on a global basis. We have retained a tight focus on our two business streams." In the 1991 Annual Report he wrote, "Marketing expenditure is key to the earnings potential and future strength of our brands. Priority for capital expenditure was given to projects which raised productivity, maintaining and enhancing our position as low cost producers, and those which extended distribution channels, making our products more readily available." "Development has been through a combination of organic growth, targeted acquisitions and partnerships." The corporation's strategy is to favour the specialist manufacture and processing of its products in a single or limited number of locations. Thus a strategy of Innovation does not preclude attention being paid to cost control and productivity. This, however, is not taken to the extreme, the emphasis being on keeping flexibility and variety at the expense of potential increases in productivity achievable through product standardisation.

In the 1991 Annual Report the Chief Executive attributes some of its success to product innovation and to product rationalisation. The Group expenditure on Research and Development in 1991 was 0.4% of turnover, compared with expenditure on marketing of 10.6% of turnover. The company launches a few products at a time, knowing that out of say three products launched only one will succeed. The flexibility of manufacturing plant allows this to take place without large losses. Some new products are due to innovations in technology which allow variations to established products. Sometimes it is the under utilisation of certain plant which promotes the launch of a new products to attempt to fill capacity. This was described by a senior executive as "more a crafting of strategy, allowing the market to determine the outcome rather than the company determining the strategy." He commented "Strategy does not have to be put within a particular time frame, that was the old way of doing things. To an extent, strategy is timeless: to be the variety manufacturer, rather than the lowest cost. Other decision flow from this basic strategy: flexibility of plant, branding of company name etc. and company structure which affects the flow of information and the degree of integration of the various functions. The wrong structure can inhibit the implementation of the strategy so organisational changes have to be made. Also the information requirements change: there was a need for customer profitability analysis as well as product profitability. Strategy changes and changes in the environment also effect the distribution of products so that the distribution network has to change in response to strategy."

Conclusions

The company needed to respond to the increased rate of change in the business environment but organisational inertia, particularly that of senior management, prevented these changes taking place. Following a change in the Chief Executive, the company has responded to changes in its business environment by seeking to differentiate its products by innovation and quality i.e. an Innovator strategy. In order to minimise the risks of this strategy it has invested in flexible manufacturing plant which is not geared to the production of a limited range of products. It is therefore able to switch production onto new products without large investments in capital, and thus minimises the cost of failure. This change in strategy is supportive of the proposition that companies which wish to be successful in a rapidly changing environment need to adopt a pro-active stance to that environment, seeking to promote change rather than responding to it.

5.2.2. Organisational Structure

Prior to 1985 the business was organised on functional lines and was strongly centralised: group marketing director, group technical director etc. The broad spread of products resulted in tensions between the centralised organisation and the need to respond to the market. In 1985 the business was reorganised into two business streams and a number of non-core businesses disposed of. Commenting on this, one of the then senior executives said, " The organisation and reporting structure was not capable of coping with the environment. The new Chief Executive decided to concentrate on the core businesses. Other businesses were seen as a distraction from the main line. Resources were being devoted to problem areas which could be put behind opportunities in the core businesses." One major area was disposed of because it required too wide a spread of management energies and had no synergies with the core businesses despite it being of a similar size to them. Commenting on the resistance to change one of the then senior executives commented, "It was the change in Chief Executive which made it happen: it was the way the tide was going, but the old regime was most unlikely to abandon the old ways. The old ways did not enable the business managers to respond to customer needs quickly enough." The change was actually driven from the bottom. Some business areas had already grafted on new organisational styles to enable them to be more responsive to the changing environment.

The business was again re-organised in 1991 into three strategic business streams, within which there are a series of operations throughout the world. A previous re-organisation (1990) moved the company from a largely geographical basis to a more products based structure. The Group Chief Executive writing in the 1991 Annual Report said, "These changes bring together in the UK the Group's key strategic management. They will ensure consistent development and execution of our global strategy and more effective allocation of resources against business priorities."

These changes have resulted in the organisational structure becoming more decentralised with fewer corporate functions. Generally, with the exception of the purchase of a major commodity and advice on technology, there is no central control of products. The large Group expenditure in advertising is largely determined by the business streams. There is strong central control over the Treasury function with surplus cash being strictly controlled. Expenditure limits are set by Group for capital expenditure. Other central services are on an arms length basis with subsidiaries free to use outside agencies.

In the 1990 Annual Report the Chairman wrote, "Our operational philosophy is to decentralise responsibility and accountability within a framework of policy, direction and control. Local management determine best practice taking account of local conditions and legislation." In the 1989 Annual Report he wrote, "Key decisions on such issues as quality and investment are taken centrally."

A Group senior executive stated that, "The organisational structure should not be seen as something fixed but as a tool of management."

As suggested by the proposed model, the change in strategy has promoted a change in organisational structure. Whilst the business environment was relatively stable a functional /line organisation structure was able to offer the required degree of information processing ability. With the change in strategy towards a more pro-active stance and its associated need to be in touch with changes in consumer preferences, the previous organisational structure proved inadequate. As suggested by the model, a strategy of Innovation required that the company change to a product or market focused strategy in order to promote the flow of product/ market information to management and thus increase responsiveness. This ability to respond rapidly to changes in the business environment was also enhanced by the decentralisation of control, giving more autonomy to business stream management.

5.2.3. Strategic Planning

Prior to 1985 the submission of the plan was by the divisional Managing Directors and Financial Directors to the Group Chief Executive and twelve directors who, it was commented, could do no more than second guess the people who were close to the market and the situation. Planning was very top down with standard forms for all divisions to allow the centre to analyses the plan. There was an expectation that all the businesses would have the same operating efficiencies and profitability, despite being in different markets and having different methods of production. The plan was in great detail with the emphasis on accounting ratios. Commenting on this, one of the then senior executives said, "It produced a lot of data which was of no use for running the individual businesses but simply fed the head office computer." The emphasis was on both financial and marketing information, the company having always been very marketing oriented. The main feature was standardisation for comparison. In terms of the proposed model, this was the type of planning system which would have been adopted by a Defender: top-down, financially orientated.

Since 1985 the strategic planning system has developed into a strategic review programme split into three parts, (1) issues identification: a discussion early in the year (February) about key issues effecting the business; (2) Debate with all levels of management who come back in April and talk about alternative ways of approaching the issues. There is some quantification of alternatives and the effect on cash flow at this stage; and (3) detailed planning from the bottom up. This future projection consists of a detailed statement for the year ahead plus three further years in outline. The completed long range plans are discussed with stream management and later with Group and stream management. The long range plan details passed to Group concentrate upon a few relevant figures: volume, sales, contribution, fixed costs, profitability pre and post interest and tax. In addition, a description of the reasons for the plan is prepared which includes markets, market shares, marketing and major product initiatives.

These plans in recent years have been accepted as they stand except when Group liquidity puts a limit on capital expenditure. The involvement of the Group in the planning process was described as "hands off if you are performing well, and hands on if you are not." Thus the process is one of consultation about strategy, from the top down, and detailed planning from the bottom up. Thus, as suggested by the proposed model, the change in strategy has promoted a change in the planning system from top-down to more bottom-up, with more of an emphasis on longer term objectives.

The strategic plan is reviewed once per year as part of the review of strategy. A comparison is made between what the business is estimated to be worth now with what it was estimated to be worth a year ago plus actual cash flows and an allowance for the cost of capital. There was seen to be a need to review the original assumptions to see which were incorrect so that future projections were more accurate. It was also seen as a way of enabling the company to take corrective action based upon the new projections e.g. develop new products to utilise projected under utilisation of capacity.

The strategic planning process has thus become a tool of management to enable them to formulate and implement strategy. Prior to the change in strategy it was seen as a tool of Group management with the lower levels within the organisation having little influence, plans being imposed rather than debated. It has now become more extensive in scope with the major influence coming from within the organisation. The proposed model suggests that such a change was necessary in order to promote the company's responsiveness to the environment by encouraging flow of information from the bottom to the top of the organisation. It was also required in order to co-ordinate the various parts of the organisation which have a tendency to drift apart strategically due to the move towards a decentralised organisation structure and increasing autonomy.

5.2.4. Control Systems

Objectives

Up to 1985 the company's objectives were in strictly financial terms but more recently the company has moved away from this approach. The main reasons given for this change were the changes in business strategy and the new Chief Executive who has a philosophy of reducing the number of measures. A key benchmark of performance has become the Net Present Value of projected future cash flows attributable to shareholders. The objective is to maximise the value of the business evaluated as the Net Present Value of future cash flows. A senior executive commented that, "Analysts are still told the usual Return on Capital Employed, e.p.s., gearing type measures as they do not understand Net Present Value." Divisions are not set specific target but are required to maximise the Net Present Value of forecast cash flows, discounted at the cost of capital to the Group. This was seen to lead to decisions which support the business strategy in the long term, rather than giving short term gains. The trade off was seen to be between the rate of growth and current profitability. The cost of capital was the major limit to the rate of investment and thus the rate of growth of the company.

This change from purely short term financial measures to more longer term measures is in accordance with the proposed model which suggests that a company adopting a strategy of Innovation will tend to use longer term subjective performance measures rather than short term financial ones. The determination of the Net Present Value of the strategy requires a subjective assessment of the future cash flows of the company.

Evaluation and Monitoring of Strategy

Commenting on the control of strategy, one senior executive said, "You cannot wait to see if it has been achieved, you have to be monitoring it progressively. There is a need to re-evaluate the strategy in terms of the Net Present Value of future cash flows and see if the company is now worth what we said it would be." The company compares the present projections against a benchmark of the previous projections updated for actual cash flows and the cost of capital. Other strategic milestones are set but are seen as part of the tactical control systems. A senior executive commented, "The monitoring of actual performance against budget is part of the tactical control system: it is backward looking. The strategic control system must be always forward looking." Thus the emphasis has moved from the short term to the longer term with a flexibility to change the short term in order to achieve the longer term aims.

Performance Monitoring

As part of the annual planning process every subsidiary produces an annual budget to standard format. The Group look at marketing performance, market share, margins and financial performance. The operating cash flow as well as profit margin is important in order to compare the financial performance with the market shape. Trading profit, operating assets and profit growth are concentrated upon, then borrowings and all other ratios. A standard return world wide is not required, the return reflecting criteria arising from the businesses themselves, the Group's market strategies for these businesses, and market positioning.

Accounts are prepared monthly by each geographical/operating unit and transmitted directly to Group. They are consolidated at Group level and then disaggregated to business streams. Additionally, an update of the annual results are prepared one week later. These accounts do not usually result in any meetings or contact between Group and the business streams or operating units unless there are significant unexpected variances from budget. Thus Group management practice a relatively hands off approach during the year if performance is close to budget. The accountant in one of the subsidiaries commented that "Group operates like an investment company: as long as you are doing OK, why should they interfere?" This is supportive of the proposed model which suggests that a company adopting a strategy of Innovation will use the budgetary control system in a programmed way, only paying it attention when the current performance threatens the long term success of the company.

In addition to the financial data, the monthly report contains physical data on sales by product line and commentary to explain significant variances. The progress of major product categories and marketing campaigns, critical industrial relations matters and major political and economic developments. A report of the market share compared with last year and the market movement in percentage terms is also produced. Thus, as suggested by the model, the company has an external focus and uses non-financial measures of performance.

Subsidiaries are also required to forecast the half year and annual results and to comment upon the changes from the budget and any corrective action taken. The emphasis is upon the key risks and opportunities which have influenced the forecast. The regular reporting and updating of forecasts was described by the accountant in one of the subsidiaries as being "a bit of a treadmill... I'm glad we're doing well, as we spend a lot of time doing reports, upgrades etc, as it is." There is thus a danger that Group management's requirements for information, even if it receives little attention on a regular basis, can be seen by subsidiary management as the main focus of attention by Group. The lack of feedback is not interpreted as relative inattention i.e. its use in a programmed way, due to the amount of resources expended in preparing the information. Thus the strategy of Group management can be wrongly interpreted.

To summarise, the company's use of its control systems is supportive of the proposed model which suggests that a company adopting a strategy of Innovation will have an external focus to its control systems rather than an internal focus, concentrating on short term financial measures of performance. The model also suggests that the company will use its budgetary control system in a programmed way, only paying it attention when the current performance threatens the long term success of the company. This was also found to be the case.

5.2.5. Commentary

This case illustrates how a company responded to changes in the business environment by adopting a clear strategy which required changes to its organisational structure, strategic planning system and control systems. Prior to 1985 the company had no clear strategy regarding its products or markets and had diversified into a number of areas loosely related to its core businesses. The business environment was relatively stable with few competitors and this, coupled with the history of the company as a family concern, had led to a very centralised, functional organisation structure. Planning was very top down and unresponsive to changes in the business environment. Control was mainly financial with some supporting marketing information.

Using the proposed framework, the company could be described as one which, prior to the early nineteen eighties, had operated in a relatively stable environment and which had the capability of low proactivity to that environment i.e. a Defender. The organisational structure being centralised and functional was unresponsive to the market. The decisions were made by senior executives who where remote from the customers and their needs. The strategic planning system did not encourage the flow of ideas from the bottom to the top of the organisation and the controls used tended to focus on the short term financial issues rather than the longer term strategic ones. As the business environment started to change more rapidly the company did not respond initially by a change in strategy, structure etc. despite growing tensions within the organisation. It was only with the change in Chief Executive in 1985 that radical changes were initiated to bring the company more into line with its environment. The strategy adopted was one of product innovation and variety, with an emphasis on quality. Thus the company changed from a Defender strategy with associated low response capability to changes in the business environment, to that of an Innovator with the capability of adopting to and indeed promoting changes in that environment. The proposed framework suggests that such a change in strategy also requires changes in the organisation structure, strategic planning systems, and control systems, and in fact such changes took place. As one of the senior executives commented, "The wrong structure can inhibit the implementation of the strategy so organisational changes have to be made."

In order to implement the new strategy the company was reorganised into two business streams, with an associated move towards the decentralisation of previously centralised functions. The aim was to become more responsive to the market by allowing decisions to be made lower down the organisation. The proposed model suggests that such a change from a functional structure to a decentralised product/market structure is necessary in order to provide the required information processing capability to support the new strategy. In addition, the disposal of non-core businesses allowed the company to focus on its core markets and to become more responsive to them.

The strategic planning system became much more extensive with an in depth annual review of strategy by all levels of the company, whereas previously it was primarily a central function. The development of the plan was now from the bottom up whereas previously it was top down with little input from lower levels of management. The proposed model suggests that these changes are necessary if a company is to respond to the changing business environment. In particular, a company which wishes to be innovative in its product development should adopt a bottom up system of strategic planning, thus allowing those who are close to the market to have a major influence. The company does not adopt a pure bottom up system as the formation of strategy is initiated from the top and is formulated through discussion and consultation with each level of management. The system is thus a hybrid of the Adaptor and Innovator systems suggested by the model. The planning horizon is relatively short term (three years) as proposed for the Innovators, but has less frequent reviews (annual) as proposed for Adaptors.

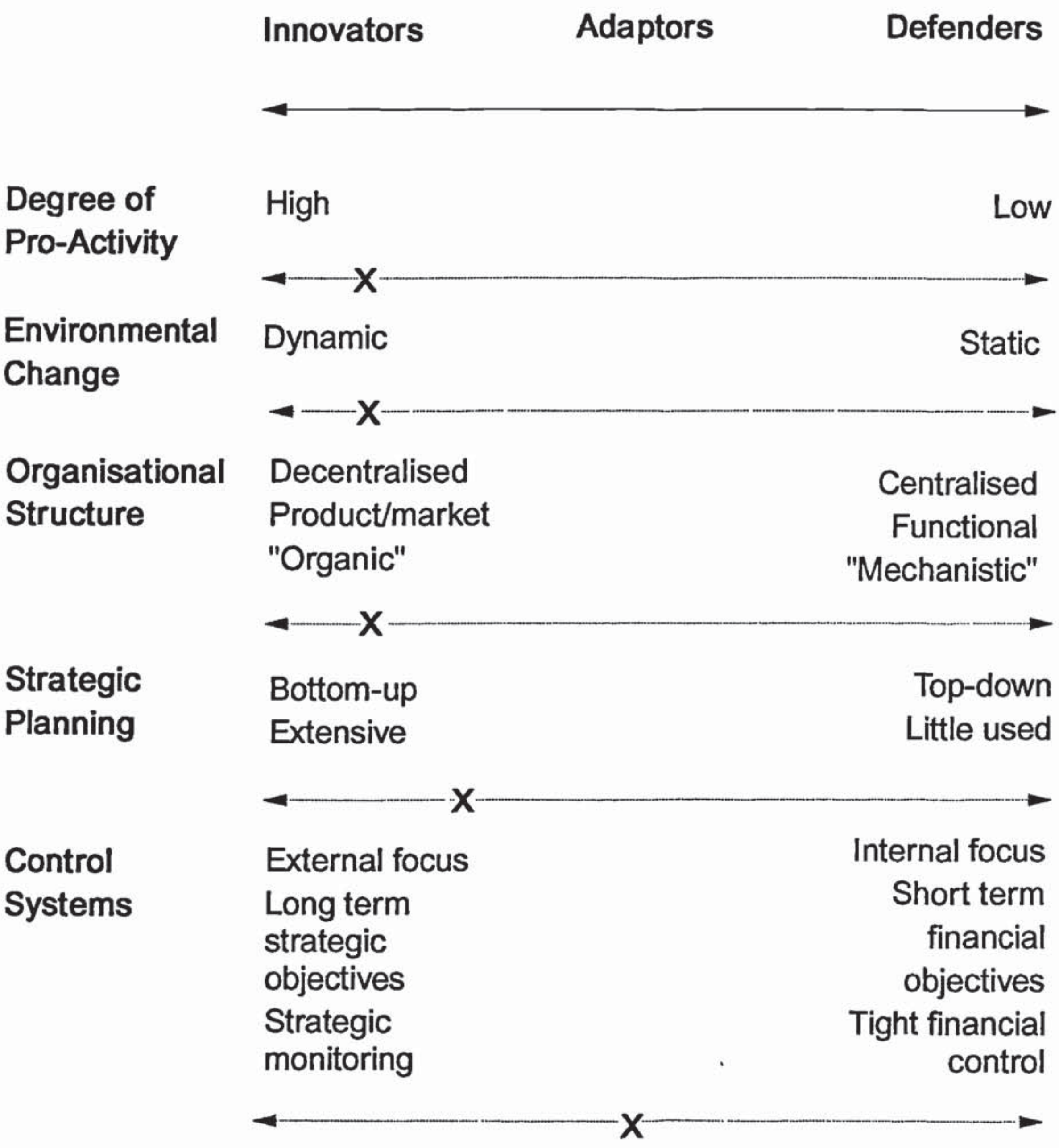
Prior to the change in strategy the company's management used mainly short term financial measures of performance to control the business. Since the adoption of a more innovative strategy the move has been towards the use of more long term measures of performance, with the evaluation of strategy being based upon the Net Present Value of projected cash flows. However, short term performance is still measured in financial terms, with the annual budget playing a key role. The proposed model suggests that such a use of short term performance measures are inconsistent with a strategy of Innovation and indicates that there is some inertia to change in this area. A previous senior executive commented that such inertia was due to the inability of the senior executives to change how they monitored business performance, still seeing it in terms of financial, quantitative terms, rather than qualitative terms.

5.2.6 Conclusions

In the above, the proposed model has been used to interpret changes made by the company in response to changes in the business environment. Initially the company failed to respond to the increasing rate of change in the business environment but following the appointment of a new chief executive made radical changes in a short period of time, particularly in the organisation structure. These changes have enabled the company to become more pro-active in response to its environment and to lead change rather than having to defend against it. The monitoring systems have, however, lagged behind these changes due to the inertia of the senior management to let go of reporting systems which in the past have served them well but which in the future may hinder them. Figure 5.1 illustrates how well the company's pattern of control mechanisms fits the proposed model.

It can be seen that the company's pattern has a good fit to the proposed model in terms of the adoption of a pro-active Innovator strategy in response to a rapidly changing business environment, and the adoption of a decentralised organisation structure. The fit is less good in the areas of strategic planning and control systems. This is seen as being due to a certain amount of organisational inertia.

Figure 5.1 Pattern Matching of Company 1 to Proposed Model



5.3. Company 2

The company was formed over fifty years ago and was a private company until 1959 when the original founder sold out to a public company. During 1980's, through acquisition, the original manufacturing base was expanded to other sites in the UK. The company also acquired two site overseas but these have now closed due to recession. Subsequently the company was taken over by a US corporation. This corporation is organised into three major groups, the company being one of them.

In the most recent published accounts the company reported a turnover of approximately £500 million, net assets of £300 million, had 5,000 employees, and had spent £3 million on Research and Development.

5.3.1. Strategic Typology

Business Environment

The company operates in a mature industry with a mature product, most of the business being replacement. To win market share, the company has to displace a competitor. There is over capacity in the industry, intensity of competition, with no competitor having more than 10% of the market share world-wide across all sectors. Consequently the bargaining power of the customers is fairly high, prices are depressed and, as a result, margins are inadequate to fund new investment. This is a fundamental problem for the industry. As a result there are a number of collaborations forming between previous competitors and between competitors and customers. The business environment was thus subject to very little change, the markets being characterised by mature products and no new competitors.

Recent government environmental legislation has promoted an acceleration in the rate of technological change within the industry. As a consequence the company has had to undertake a programme of product development. In the 1991 Annual Report the Group Vice President wrote, "We foresee monumental changes in our industry in the years ahead, as manufacturers and customers alike come to grips with the paramount issue of our time - respect for the environment." Thus the rate of change of the business environment has increased, from practically static towards one which requires more product innovation. According to the proposed model, this should result in a consequent increase in the pro-activity of the company if it wishes to stay in the mainstream of the market. An alternative would be to find some niche and to continue to adopt a Defender type strategy.

Business Strategy

The company has a formal Mission Statement: We wish to be the most successful producer of (company product) in the world in the eyes of our customers, employees, and shareholders. Each strategic business unit within the Group has its own mission statement. These mission statement came about shortly after the setting up of the business unit organisation. The mission statement is printed on the back of the company ID cards. In order to achieve the mission it is believed that the company needs to adopt a certain philosophy: a questioning philosophy on the right to exist. A continual justification of the function of each part of the organisation. The employees are encouraged to act as teams. A major emphasis is on Total Quality Management, introduced two years ago: "There is an impact upon quality within every process within the organisation." This emphasises the need to ensure that they are "best in class", established by benchmarking other companies in the industry. It is recognised that they need to balance these longer term objectives with the need to meet the short term financial targets: "We have a debt to repay".

Following on from the company mission is a Group vision of where they want to be by the year 2000: market position; profitability; perception by stakeholders (customers, employees, shareholders); and strategic alliances. The business units plans are expected to move the company towards this vision. The Group divests itself of businesses which do not fit into this vision.

Due to the low margins in the industry leading to a lack of money for investment, a major thrust for the business is the development of strategic alliances between themselves and customers and even with prior competitors. As part of this the company also has adopted a "Win with winners" strategy, where the aim is to be the major supplier to customers who are themselves the market leaders in their business sector. They seek strategic alliances whenever possible, having set an objective of forming one major strategic alliance per year. A major thrust of the marketing strategy is to increase their share of the market in a business sector in which they have had little presence previously.

The company has adopted what it terms a value added strategy which was originally confined to manufacturing but which now encompasses other areas e.g. distribution and after sales service. This defines the business the company is in, i.e. we are in the business of designing and selling quality products, not manufacturing. The company wish to be in control of the design and development of the product, quality of the product and therefore of assembly and test. They want to market and sell the product, and control the after market operation. They are not concerned whether they manufacture components or not. In the last decade they have moved away from vertical integration to the assembly of bought in components, with some machining of major components themselves. This move towards out sourcing of components has given more flexibility to respond to changes in market demand and has reduced the work force by half. It has not resulted in any increase in costs due to the company being able to out source from supplier who can supply at, or below, the previous own manufacturing costs whilst maintaining the required quality standard. Overseas production is under licence, with fifteen licensees throughout the world who manufacture approximately the same number of products as the company in the UK. Some of the licensee products are at an earlier design level but all are subject to the same quality standards.

The main thrust of the business is in terms of delighting the customer in terms of quality, price, value for money, delivery, terms, and service. The objective is to lead the customer in what he wants. The company see improvements being made to the product in terms of reliability, servicing etc. but do not see corresponding price increases, and therefore the Group set cost reduction targets to increase margins. The product has not seen much development over the past fifty years, although government environmental legislation has promoted recent developments. This legislation is seen as a major challenge and is therefore consuming a major part of the research and development budget, leaving less money available for research and development of new products. New product development has therefore had to become more efficient to compensate e.g. using computer simulation rather than prototyping in order to save development costs.

Conclusions

In terms of the proposed model, the company has responded to the increase in the rate of change of the business environment by becoming more pro-active. It has not sought, like company 1, to promote change within the business environment, i.e. an Innovator, but rather to respond to change, i.e an Adaptor. Its focus has therefore been more towards differentiating its products in terms of quality, reliability, delivery and after sales service, rather than product innovation, although some innovation has been necessary due to Government legislation and the move towards more environmentally friendly designs.

5.3.2. Organisational Structure

In 1986 the company adopted a strategic business units structure. Prior to this the whole of the company was organised on a functional basis. A senior manager commented, "Our experience since then is that it is beneficial for our type of company. We have more effective management of assets, more profitability because we have more focused management and a greater commitment from the line management." The company is now organised into five business units: three manufacturing, engineering consultancy and central distribution and after market customer support. The engineering consultancy supplies all research and development to the Group but also offers services to third parties.

The Group has a relatively small staff operation to ensure consistency of process within finance, human resource management, business and strategic planning, legal services, operational audit and information technology. The business units must come through Group for these services. Most of the Group expenses are recovered by a Group charge on business units based on turnover, very few being paid for on a usage basis. Central public affairs are also managed at Group level but detailed marketing and promotions are controlled by the business units.

One of the senior managers felt that the change to the business unit structure was made by the Managing Director because he considered that the company was not getting the best out of its employees. The functional structure discouraged people from taking responsibility for the problems preferring to blame other departments. There was a need to focus responsibility by product. Prior to the appointment of the present Managing Director the company tended to have consensus management across all functions. It was felt that the Managing Director changed the structure to SBU's so that he could deal with each unit separately.

This change in organisation structure came prior to the change in company strategy, rather than being as a consequence of it. The change, however, promoted the flow of product information within the organisation and increased its ability to respond to changes in the environment. When the changes were required the company was in a position to respond appropriately. This is supportive of the proposal in this research which suggests that an appropriate organisational structure is required to promote the flow of product/ market information within an organisation and thus influence the formation/ emergence of strategy. Without such a structure the information available to management is limited and thus an appropriate response to environmental change may not be made. The previous functional structure, although efficient in terms of cost, was inappropriate in a changing business environment.

5.3.3. Strategic Planning

Annually, each of the business units and Group produces a five year business plan which includes an analysis of the market and competitors, target markets and target customers, and competitive position. The plans are regarded as the strategic business units' plans as they are prepared by them, within the guide-lines laid down by Group i.e. a bottom up process in terms of planning, a top down process in terms of the strategic and financial objective which have to be achieved. These plans are reviewed through several iterations by the Group Managing Director and staff to ensure that the business have sound strategies and that the numbers generated by those strategies are believable. The strategies which are adopted have to be consistent with the overall Group strategy. A major part of the Group strategic planning department's task is to ensure this consistency by communicating the Group strategy and ensuring conformity to it. The first year of the five year plan becomes a committed budget against which actual performance is monitored. The second and subsequent years are not committed but any changes made during the following years plan review are analysed and managers are required to gives reason for changes. Thus the whole five years has to be a sound plan.

This use of the strategic planning process by the company is consistent with an Adaptor strategy. The process is top-down, bottom-up and is controlled by a central planning department. It differs from Company 1 in that the plans of the SBU's are reviewed and amended by Group, whereas those of Company 1's business streams were not. Both companies had strategic guide-lines set by Group but within Company 1 this was as a result of consultation with the business streams, whereas within Company 2 the Group strategy was dominant i.e. the SBU strategies had to be supportive of it. Company 1's strategy was more emergent, whereas that of company 2 was imposed.

5.3.4. Control Systems

Evaluation and Monitoring of Strategy

The ultimate test of business strategy was seen to be shareholder value. The company uses a shareholder value model to measure strategic actions. The US corporation expect the Group as a whole and individual businesses within it to enhance the shareholder value year on year. A computer model is used to calculate the shareholder value of different strategies but the values given are seen as just one of the ways of evaluating strategy. Thus the company, at least in terms of its evaluation of strategy, adopts a long term strategic view rather than a short term financial one.

Objectives

The business units have a high degree of business autonomy. Targets and guide-lines are agreed with Group management at the beginning of the year and are fundamentally financial in nature although there are other quantitative and qualitative targets set e.g. customer orders, head count. Once a target is agreed it is up to the individual business units management to ensure that it is delivered. Different targets are set for each business unit which are agreed through negotiation as part of the planning process. The Group as a whole has targets to meet set by the US corporation. These are spread by the Group across the business units.

Financial targets were said to be "stretching", so that if the SBU's met the budget people were generally pleased. Bonuses are paid on achievement of budget: staff 10% of salary, senior management 25% of salary. The company were said to be looking for stability and financial robustness, not volatility with very high returns one year followed by poor returns the next.

The company's use of controls is in agreement with the proposed model which suggests that a company adopting an Adaptor strategy will have both qualitative and quantitative measures of performance and will attempt to balance short and long term performance. The danger is that since the bonus is paid on achievement of the annual (short term) budget, the primary focus of SBU management will be short term.

Performance Monitoring

The five year plan is reviewed annually by Group as part of the strategic planning process. As part of this process each business unit produces a strategic action plan which is essentially a number of key projects with objectives and implementation milestones. The performance targets relating to these objectives and implementation milestones tend to be non-financial in nature although financial ones are sometimes appropriate. An estimate of the annual cash flow of each of these key projects and a calculation of the shareholder value (Net Present Value) is usually made. These strategic action plans are monitored quarterly together with the first year of the plan i.e. the committed budget. This quarterly monitoring also include the generation of an updated forecast. There is also quarterly monitoring by Group of a number of operational, non-financial measures e.g. proposal conversion rate, new customer orders. This quarterly monitoring of strategic action plans is a way of ensuring that SBU management do not narrowly focus on the short term objectives but retain a strategic perspective.

Financial results are reported monthly by each SBU to Group but there is no debate if they are on target against budget. They are also monitored in detail each quarter even if they are on track. The emphasis over the past two years has moved away from purely financial to looking at the non-financial measures including looking at the strategy. It was commented that, "It is all very well looking at the financial history, but that is not telling you what is happening to the company in the future. The value of the shares is more dependent upon what is going to happen to the company in the future." Previously, management had pages and pages of financial schedules which they used to pull out and argue about detail. It was considered that this did not really give management a very good feel for what was going to happen in the future. The perspective is now more longer term, providing performance is within the short term financial objectives.

Again the balance is between the short and long term performance of the company. By focussing on the forecast rather than actual performance against budget the Group management are focussing management's attention on future prospects rather than past mistakes. The model suggests that such a use of the control systems will lead to a more innovative strategy. The company are using their control systems to promote organisational learning by focussing managements attention on the key strategic issues. This is in contrast to Company 1 where the control systems were lagging behind the strategic direction. These two cases illustrate how a company's control systems can be used as a means of promoting and supporting the strategic direction, or as an inertia to change. One explanation of this may be that within Company 1 the strategy is more emergent and as a result the Group management need to maintain control by means of financial performance measures, whereas within Company 2 the strategy is more imposed and is therefore more supported by management. Within Company 1 the control is in terms of constraint, whereas within Company 2 it is in terms of which direction to move forward.

5.3.5. Commentary

This case illustrates the changes a company operating in a previously stable environment has made in order to respond to environmental legislation which has promoted an acceleration in the rate of technological change. Prior to this there had been little fundamental change in the product: the basic design was recognisable to those used thirty years previously. The nature of the industry means that there is little money available for investment in new product design and development, yet the recent legislation has made this mandatary. At the same time, the need to become more responsive to customers and to manage the company more efficiently has promoted changes in the organisational structure and control systems.

Prior to 1986 the company did not have a clear strategy regarding its customers or products. The history of the company as a private company run by its founder had led to a very centralised, functional structure. Planning was top down with all major decision being made by consensus management. This resulted in a organisation which was unresponsive to changes in the business environment i.e. a Defender. Subsequent changes have moved the company from this position towards that of an Adaptor with more capability of adopting to changes in the business environment.

The first of these changes was precipitated by the acquisition of other sites in the UK. These acquisitions made the previous centralised management by consensus inefficient with little focus on the individual manager's responsibilities. The change to a strategic business units structure was therefore made to promote a more focused management with greater commitment to their business units. Such a change also enabled the company to be more responsive to changing customer requirements.

The competitive nature of the industry and the maturity of the market and product means that there is little opportunity to differentiate the company's products in terms of innovation i.e. to adopt an Innovator strategy. Some innovation has been required in order to meet government legislation but this was as a response to that legislation i.e. it was not pro-active, seeking to stimulate the rate of change of the business environment. The company has therefore sought to differentiate its products by quality, reliability and after sales service i.e. an Adaptor strategy. Thus one of the major thrust of the company's strategy has been towards improvements in quality (Total Quality Management), and manufacturing efficiency, the emphasis being on adding value. In order to overcome the problem of insufficient revenues for product development and innovation, given the changes which have become necessary through legislation, the company has adopted a strategy of seeking strategic alliances with customers and other manufacturers of similar products. The aim is to share development costs and to ensure a market for the subsequent products.

Coupled with these changes in organisational structure and strategy have been corresponding changes in the strategic planning and control systems. The strategic planning process has changed from top down to one which is top down in terms of guide-lines and strategic objectives and bottom up in terms of the detailed plans. This allows the strategic business units a degree of autonomy whilst ensuring that their strategies fit in with the overall Group strategy. It is not as responsive to changes in the business environment as a pure bottom up process, as strategies come from the top rather than emerging from the lower levels of management who are nearest to the customers and markets. The proposed model suggests that a top down, bottom up process is best suited to the strategic stance adopted by the company (Adaptor), a more extensive bottom up system not being required due to the relatively stable business environment.

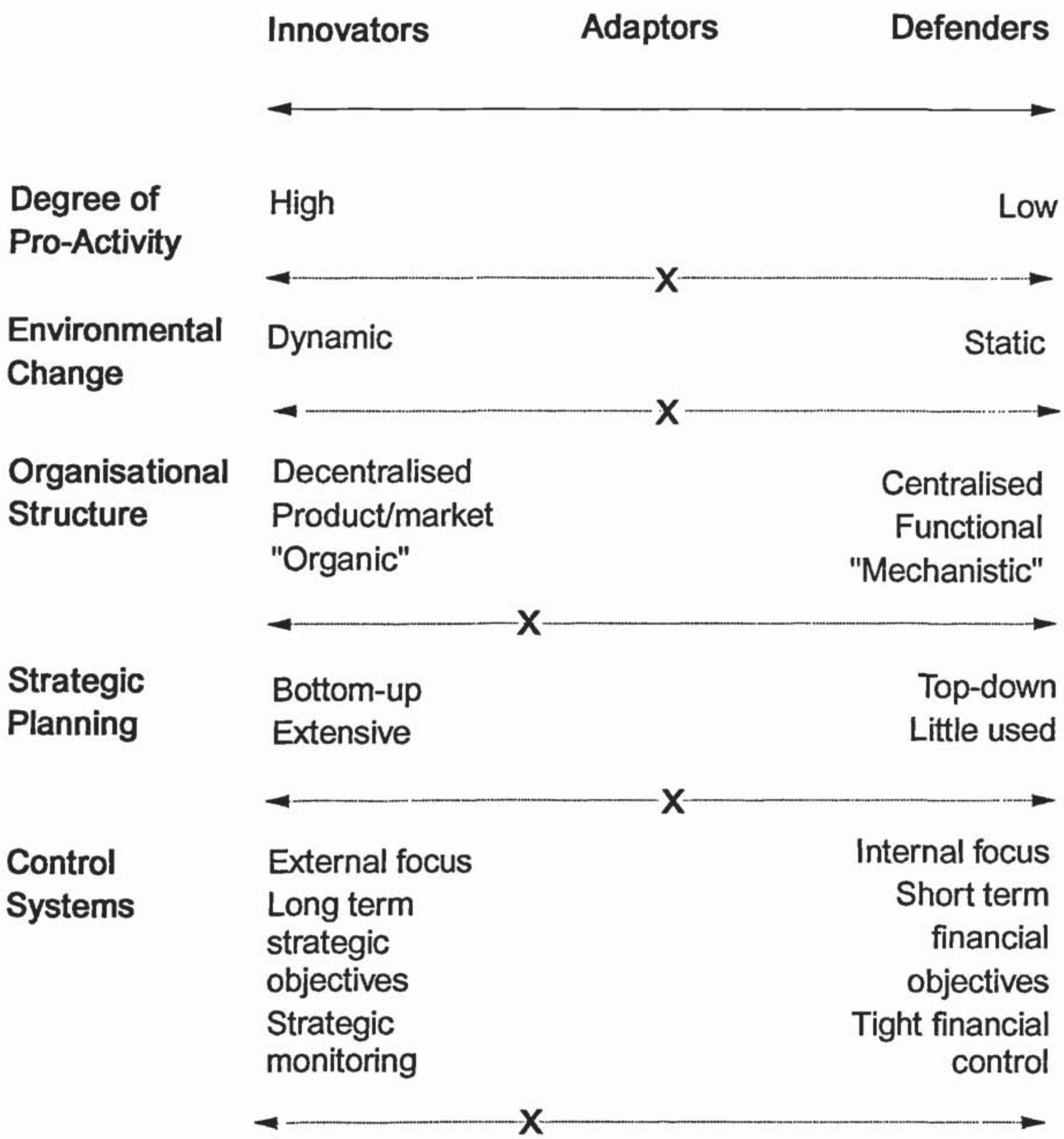
The changes is the control systems are those which would be expected when a company moves from a Defender type strategy to that of an Adaptor, but these changes have been made more slowly compared with the changes in organisation structure and strategic planning. It is only within the last two years that the emphasis has moved away from the detailed analysis of historic financial information to forecast financial and non-financial information. It appears that there has been some inertia within the company in making these changes. Previous research (Coates and Longden, 1989) highlighted that this inertia to change was a common attribute of management accounting systems within technologically innovative companies. Senior management found it difficult to change their view of the organisation and therefore the type of information they required to monitor performance. However, within the past two years the focus of the control system has changed so that more emphasis is now placed on the forecast of future prospects rather on the analysis of past performance. The Group are now using the control system as a tool of organisational learning to promote a strategic perspective within management.

5.3.6. Conclusions

In the above, the proposed model has been used to interpret the changes made by the company in response to changes in the business environment. In particular, the rate of change of the business environment and the company's degree of pro-activity towards that environment pointed towards an Adaptor strategy. The subsequent analysis has revealed a consistency between the hypothesised control attributes of this strategy and those used by the company. The match of the attributes of Company 2 to the proposed model are illustrated in Figure 5.2.

It can be seen that the company's pattern has a good fit to the proposed model in terms of the adoption of an Adaptor strategy in response to a changing business environment, and the adoption of a top-down/ bottom-up strategic planning system. The fit is less good in the areas of organisational structure and control systems. This is seen as being because the Group management are using these systems to promote change and organisational learning. According to the model, this will have the effect of making the company more responsive to changes in the market and thus promoting the emergence of a more innovative strategy.

Figure 5.2 Pattern Matching of Company 2 to Proposed Model



5.4. Company 3

The 1991 Annual Report states, "The company is a major processor of (materials), providing a vital link between producers of basic materials and manufacturers of countless finished products. With leading brands of its own, (company name) also creates quality in finished products for the home and for industry. Through its distribution of (products), (company name) delivers value in specialist materials to a multiplicity of customers world-wide." The Group Planning Manager commented that this was pure PR. It was written in isolation by the PR people without consultation. It was not part of any strategic thinking by the Group.

The company has a turnover of approximately £1,200 million, net assets in excess of £250 million, employs 13,500 people world-wide, and spent approximately £6 million on Research and Development in the current year.

5.4.1. Strategic Typology

Business Environment

The company operates in a number of mature markets which are subject to extreme price competition. Sales are 68% UK based and have, as a result, been adversely affected by the recession. The company is mostly an intermediate supplier to industrial customers, but has some consumer products. In the majority of markets the number of competitors has been stable or has reduced in recent years. Some competitors have been bought out by European companies. In a number of its markets the company has sought a niche position in order to avoid direct competition. Some of the company's markets are becoming increasingly international, mainly European.

There have been very little innovation in the basic products in recent years except for a change in materials and production methods. The company is not a major spender on Research and Development (0.3% of net operating costs). In one of its consumer markets the company needs to bring out new products every two years. In other areas there is some movement into related products or upgrading of existing products. In one market the Company had a British Standard to protect its large market share position. The introduction of a new Euro Standard forced the company to change its product range. One positive consequence of this change was that they now have a product which they can sell in Europe. This would not have come about if the standards had not changed.

Thus the business environment in term of competitors and products is very stable with a relatively slow rate of change. The proposed model suggests that a company operating in such an environment will be most successful if it adopts a Defender strategy i.e. it has low pro-activity to the market and seeks to defend its position by being the lowest cost producer. It does not seek to promote change but reacts to changes if necessary.

Business Strategy

The Chairman and Chief Executive in the 1989 Annual Report stated that, "Six years ago the (company name) management set about the task of reshaping the Group, which at that time was regarded as a run-of-the-mill (materials) group, into a broadly based organisation with a variety of strategically strong core businesses, providing further potential for growth."

The Group has adopted a strategy of seeking to be the lowest cost producer in each of its business areas, as it considers that otherwise it would be very vulnerable in the marketplace. As noted above, this is consistent with a Defender strategy. The Chairman and Chief Executive stated in the 1987 Annual Report that, "Our strategy in (specific product) has been to expand our interests into high value added products which lend themselves to our low-cost, flexible production units, and this has been supported by investment in technology, plant and equipment and by strategic acquisitions.... Our (specific product) Division is now recognised to be the lowest cost producer in the industry..." In pursuit of this strategy it links production units with strong specialist distribution channels, goes for a large market share within niche markets and couples this with tight financial controls and good cash flow. The Chairman and Chief Executive stated in the 1987 Annual Report that, "Our strategy of developing the Group's core businesses in product related areas, whilst concentrating on low cost, flexible production and vertical integration of operations, is now showing the expected benefits in profit terms right across the Group." In the 1988 Annual Report he stated, "..... in developing our operations we have been guided by our proven strategy of:

- Growth through market leadership in our core businesses;
- Growth through investment in lowest-cost flexible production, linked wherever possible to the strongest distribution of these products;
- Growth through domestic and international expansion by strategic product related acquisitions;

all within the limits of our well established performance ratios of asset management." Commenting on the Group's strategy, the Group Planning Manager said, "If you are in competitive markets, commodity markets, you must be the lowest cost producer. Ideally you do not compete simply on price for volume, you find some niche, some way of supplying service, and you get better margins. But if you supply a commodity, there is no way of getting away from it, you must be the lowest cost producer." Commenting on the lowest cost producer strategy he said that, "So long as (current chairman) is there as the dominant force in (company name), that will not change. We are accounting led. We are a financially dominated conglomerate. But this is not the whole story. The company does make some investments which a pure financial control company would not." This concentration on efficiency and financial control is entirely consistent with the adoption of a Defender strategy.

The Group does not set strategic objectives for its Divisions but leaves them to determine their own ways of meeting the Group objectives. In the 1987 Annual Report the Chairman and Chief Executive stated , "All Divisions are encouraged to develop their own strategic objectives and to bring forward acquisitions for consideration by the main board." Although the Group as a whole has not imposed its own independent product strategy on the divisions, individual divisions have their own strategies, to a greater or lesser extent. One of the divisions, for example, has the aim of being the world's leading supplier of specialist (product name). It aims to supply the complete range of products into the world market. It looks for the gaps in its product range and seeks to fill them, if it can do it at a profit.

Businesses which do not meet the rigourous financial objectives are considered for divestment. The Chairman and Chief Executive stated in the 1987 Annual Report that, "We have also continued our programme of divestment of non-strategic businesses." The Group Planning Manager commented that there is always an element in corporate communications of "gilding the lily". Good divestments have been made, converting "fat assets" into cash but in the present climate it is difficult to sell companies at a profit. The company would sell more if it could but they will not sell and make losses. They therefore keep them running, "We are quite good at running things 'in extremis'. That's the thing the company is best at." The Group aims to set a framework within which decisions which either can or have to be taken move the Group always in the desired direction.

There is some move towards a core business strategy but this is evolving slowly and is not articulated at present, e.g. the company is gradually reducing the number of business they are in and becoming geographically wider spread. The Group Planning Manager commented that, "The ultimate summary of a financial control strategy: that anything which makes money is a core business, is nearly true, but not quite."

Conclusions

The business environment in term of competitors and products is on the whole very stable with a relatively slow rate of change although this varies from division to division (see Figure 5.4). The recession has affected some divisions more than others, one in particular gaining market share at the expense of competitors. The proposed model suggests that a company operating in such an environment will be most successful if it adopts a Defender strategy i.e. it has low pro-activity to the market and seeks to defend its position by being the lowest cost producer. The company has in fact adopted such a strategy, seeking to be the lowest cost producer in its core businesses. The emphasis is not towards product innovation but product stability.

5.4.2. Organisational Structure

The company is currently comprised of two Sub-Groups within which are five Divisions (split three and two), each specialising in different product-market areas. Each Division is comprised of Sub-Divisions, each trading under its own name, and responsible for a part of a Division's product-market portfolio. Sub-Divisions are comprised of a number of Operating Units. The underlying philosophy is that of considerable decentralisation of marketing and production to Divisions and Sub-Divisions. Each Division controls its own overseas subsidiaries; overseas subsidiaries are in fact allocated to Sub-Divisions so that there are no 'overseas Divisions'. The policy is to manage the Group by product market world-wide rather than by geographical area. This organisational structure does not fit with that suggested in the proposed model for a company adopting a Defender strategy i.e. a functional/ line structure. The structure adopted is more like that expected to be used by a company adopting an Adaptor strategy i.e. a mixed structure, tight control from Group to the Divisions, and flexibility within the Divisions. This form of mixed structure assists the flow of strategic information from the bottom of the organisation to the Divisions but inhibits the flow from the Divisions to Group. It therefore tends to promote the emergence of strategy within Divisions but will tend to inhibit the emergence of strategy at the top of the organisation i.e. it will tend to be imposed. This structure is therefore a good fit with the way the company formulates strategy: top-down financial to Divisions, bottom-up strategic within Divisions. According to the proposed model the organisational structure has the potential to facilitate the adoption of a more pro-active strategy i.e. a move towards an Adaptor strategy.

Operating units have a functional organisation structure, their Managing Directors being, ex-officio, a member of the Board of the Sub-Division, together with a Sub-Division Managing Director, Finance Director, and sometimes the Marketing and Production Directors (The Group has few marketing directors). The Sub-Division Managing Directors are, ex officio, a member of the Divisional Board, together with Divisional Managing Director, Finance Director, and sometimes the Marketing Director and Production Director. The five Divisional Chief Executives in turn sit on the main Group Board together with the Group Managing Director, Finance Director and Chairman and some non-executive directors.

The Group has a separate Property Division. All Group property is taken into the Property Division and every unit is charged a slightly discounted market rent which is adjusted on a yearly basis. Subsidiaries can give the property company six months notice if they wish to vacate i.e. they can reduce space utilisation and thereafter pay no rent upon it.

Commenting upon the above structure the Group Planning Manager said that, "The Group has gone through several sorts of organisational structure but this has really been playing about with the top layers, on top of a deeply held and intuitive Group structure which is to devolve as much power as we can to operations and the individual unit operating managers."

In the early 1980's the company had thirteen Divisions each with a chief executive, some of whom where on the main board, some of whom were not. That was considered not to work. Due to the retirement of a number of the Divisional Directors the Group were able to get to a situation where none of the Divisional Directors were on the main board. The main board then comprised the Chairman, Chief Executive, Finance Director and non-executive directors (five in total). Below this was an operations board consisting of the Chief Executives of each of the Divisions, plus the Group Chief Executive and Finance Director. This was considered by the Group Planning Manager to be the best organisation that the company had had.

Eventually, the Group Board increased due to the desire to reward Divisional Directors by promoting them to the Group Board. This has led to the current organisational structure with the five Divisional Directors on the Group Board. Due to a number of Group Directors retiring there is again an opportunity to reorganise. The company are now seeking to return to an Executive Board of Chairman, Chief Executive, Finance Director, Non-Executive Directors, plus, this time, two trouble shooters. These are partly for fire fighting and partly because the Chief Executive wants to impose a stronger strategic direction on the Group. He wants to get away from pushing all the power down to operations and for the company to become a more strategy driven Group. (This has now been implements, plus the formation of a "Strategy Board" consisting of the Chairman, Chief executive and the Group Planning Manager. The aim of this was to give more top-down strategic direction to the Group. They are seeking not to be influenced by peoples wish to maintain the status quo and be conservative.)

It was commented that, "In the 1980's we could allow strategy to percolate up from the bottom because times were so good and therefore we could grow everything at once. We are not able to afford that any more. We need to have the structure in place to be able to monitor, critically and hard, the strategies put forward by the Divisions and to be able to impose our own direction on them. With the proposed top level structure, the managers who run the operations will not be at the forum where the strategic decisions for the Group are taken. The fact that the Divisional Chief Executives were there, guarding their own areas, has stopped the Group making major decisions." Such major decisions were mainly concerned with investments and divestments.

This reorganisation was not seen to have been precipitated by the recession so much as the retirement of Board Directors. The company have been able to change strategy and the way they impose strategy because of organisational changes. They saw that they had to make these changes in structure before they could change the strategy.

As in Company 1, it may need the change of the Chief Executive to move the Group from a financially controlled company to one which is more strategically focused. (The Chief Executive in fact changed in 1993 but it remains uncertain which direction he will choose to go in. His background indicates that his focus will probably be in terms of production and administrative efficiency. He was quoted as saying, "If you have a choice between two investments you put the money where its gives you the biggest return." indicating a continuing emphasis on financial control.) The proposed model suggests that the current structure is able to provide the necessary information processing capability required for such a change, but that other systems will also require changing e.g. Strategic Planning and Control, before the company can become more strategically orientated. It is these systems which will need to be used to direct management's attention onto more long term issues. (The Group Planning Manager commented that he saw the annual budget as an accountancy exercise which is for control purposes only.

Strategic planning is not for control in that sense i.e. day to day. The present focus of management attention was on the monthly financial performance although this was changing under the new Chief Executive who required information about the current business environment and other strategic matters such as acquisitions and divestments in addition to the financial reports. The Group Planning Manager did not think that the control systems would ever change to any significant extent.)

5.4.3. Strategic Planning

The Group undertakes an annual strategic review. Commenting on this the Strategic Planning Manager said, "There are parts of the Group which we need to grow and parts of the Group which need to generate cash to fund the growth in other parts of the Group. The strategic review tries to look at what we are good at. What are our skills and what are the opportunities in the world market. We then decide what to put money into and what to seek to generate cash from. We look in terms of market possibilities. We avoid the production of small numbers of large things, we are very bad at it i.e. capital plant items or contracting. We are better at producing a large number of small things." This fits in well with the short term financial controls and short term investment criteria e.g. payback.

The Group has no long established planning procedure. The form of each annual review is changed according to the business environment and the state of the Group. In this way they avoid the planning process becoming part of the bureaucracy: it is thought out every time. The product of the planning process is a review of strategy, not an immovable plan. The Group Planning Manager said, "We like planning, but we do not like plans - as soon as they are written they are out of date." The Divisions know the Group's strict financial targets and given considerable autonomy in the way in which they achieve them. Not all divisions are expected to achieve the same performance. The Group looks for them to achieve the best they possibly can. Some divisions prepare two to three year financial plans for their own management purposes but this is not required by Group. Strategic plans are required by Group where there is a major change e.g. a major divestment or reorganisation. In this case they are required to send to Group a strategic summary prior to the strategic review meeting. This contains the following information: description of markets in which each business unit operates, changes in the market, information on major competitors, customers, technical developments, product and process development, desired position in market over long term, choices of strategy available and chosen strategy.

The Group's strategy has in the past been the sum of what the Divisions were capable of achieving subject to overall strategic considerations. Divisional strategies and plans have to be justified to the Group but are not required to be in any specific form provided that they consider the Group's competitive position and how to improve it. Plans are accepted subject to the availability of funds at the centre and providing that they do not involve going further into certain markets which the Group considers too risky.

Thus, at the Group level the strategic planning does not follow a formal process, nor are detailed strategic plans considered of any great value. The recent reorganisation of the Group Board will tend to make the process even more top-down. The proposed model suggests that Defenders will make use of strategic planning to communicate from the top down the goals of the top management and that these goals will tend to be of a financial nature rather than strategic. It also suggests that annual plans will be more important for control purposes than longer term strategic plans. The Strategic Planning Manager commented that that is all they (annual plans) are for. Annual plans need to be consistent with the strategic goals of the company, but there is no formal link between them.

5.4.4. Control Systems

Evaluation and Monitoring of Strategy

The Group do not have any formal strategic plans (i.e. specific objectives over a specific period), nor do they use any formal means of financially evaluating strategy or monitoring strategy other than the annual strategic review. Divisional plans are evaluated in terms of general strategic direction and whether they meet the Group's financial criteria. There are no current pressures to use a shareholder value type model although the Group Planning Manager commented, "The way we run the Group leads to management actions generally consistent with shareholder value maximisation."

Objectives

The Group has set itself financial objectives of:

1 a 20% increase in earnings per share each year.

2 return on capital employed of 25%.

3 debt equity ratio below 40%.

The Group Finance Director commented that, "They are financial objectives. What the shareholder wants to see is growth in earnings per share and this objective is pushed down to Sub-Divisions through a performance related incentive scheme." It is believed that Group objectives are well known throughout the company, being conveyed and reinforced through the regular meetings of Managing Directors and Financial Directors, Group conferences and budgetary and informal meetings, as well as the Groups Incentive Reward Scheme. The Group Planning Manager commented that the first financial objective (20% increase in e.p.s.) has been "quietly dropped" due to its non-achievement in recent years. A new objective of keeping employee emoluments below 60% of value added has been recently (1992) introduced.

The Group Financial Director considered that the main integrating mechanisms of the company were the linkage of objectives, strategies, performance and incentives. In support of this view the Chairman and Chief Executive stated in the 1987 Annual Report, "All our managers are involved in the development of the Group's Strategy and are therefore committed to the implementation and achievement of our agreed objectives. The linking of remuneration and incentives to performance is an essential ingredient of our growth culture.

The main change in recent years has not been the performance measures used but the required performance. The target of a 20% increase in earnings per share was not required until 1984. The change came about when the present Chairman succeeded his predecessor. Until that time the company had a fairly low price earnings ratio in the City. The new Chairman initiated a Stock Market survey using consultants who approached banks and brokers to ask what the City thought of the company. The feedback that they received was that it was a company which was reasonably financially run but which had no apparent objectives, no managerial cohesion and a debt equity ratio that was too high. As a result the company started to address these problems, some real, some of perception. One of the consequences was the target 20% increase year-on-year in earnings per share (now "quietly dropped").

There are no other measures used other than financial ones. They are aware of the market share of most of the companies but they are not reported to Group on a regular basis. The Group Planning Manager would like to introduce some value added measures e.g. value added per employee, as he considered that these measures would be directly comparable between the various businesses of the Group. He considered that these were the sort of measure that the accountants should have been developing and was concerned that in paying too much attention to Return on Capital Employed there was the danger of sacrificing market share. He would have liked to see more of the businesses set their targets in terms of market position or technical position. The financial control measures were seen as necessary but not sufficient.

This use of financial objectives is entirely consistent with the company's Defender strategy. The proposed model suggests that a company adopting a Defender strategy will have an internal focus to its control systems: intensive monitoring of short term performance, a focus on financial rather than strategic goals (strategic goals were seen as being less easy to articulate), quantitative rather than qualitative and this is very much the case.

Performance Monitoring

The overriding philosophy of decentralisation is linked with the philosophy of ensuring that the Group's financial objectives are fully delegated to the Sub-Divisions. In effect, therefore, the financial targets are passed down to Divisions and in turn passed down to Sub-Divisions. This works by means of a disaggregation of capital employed down to divisions and subsidiaries linked with a performance scheme which rewards year-on-year performance by managers.

The performance figures for Divisions are given to the Board monthly and are accompanied by the Financial Director's summary of the periods operations. Full financial operating data is also available and concentrates on the principal profitability and asset measures against budget and previous year figures, both monthly and cumulatively. A half year and full year forecast/up-date is also prepared. Monthly reports do not show variances as it is considered that these would clutter an already full document. The Group Financial Director did not consider that these monthly financial reports were the principal control mechanisms. Control, he believed, acted at every level and over shorter time periods. He commented that these reports were looked on as the Group's 'insurance'.

The performance of sub-Divisions is monitored closely by Divisional and Group Management. Monthly accounts are prepared in considerable detail both for local and Divisional/Group control. The information provided includes sales, cost and profitability analyses, against budget and the previous year. Additionally, other documents provide data on working capital trends/management, borrowings and deposits, a sales report covering order levels, a market review, future plans and revised forecasts, production, technical, manpower, health and safety and industrial relations reports and a capital expenditure report.

Each month, Divisional management visit sub-Division head offices to review the accounts package, every aspect of which is on the agenda of the meeting, all aspects receiving attention. These meetings are not placebos. Action plans are suggested by Group, agreed upon and subsequently monitored e.g. specific actions to reduce stock levels.

From the above it can be seen that the financial monitoring system is being used extensively to control the business. In contrast to company 2, the company is using its control systems to monitor its current position rather than promote organisational learning towards a future perspective. Such a use is consistent with its Defender strategy which requires a primarily inward focus.

5.4.5. Commentary

This case illustrates the strategy and control systems adopted by a company in a stable environment. The focus of the company's strategy is short term financial returns and sustaining growth in earnings per share. In terms of the proposed model, a company which operates in a stable environment and which has a low pro-activity to that environment has been classified as a Defender. It was suggested that such a company would often attempt to defend their position by becoming the lowest cost producer, and this is in fact the case in this instance. Defenders are most successful in a slowly changing environment with relatively stable products and markets. As was noted above, the company's markets are in general relatively stable with little product innovation. One danger of this position is the company's lack of responsiveness to environmental change e.g. increased competition from foreign manufacturers. The company is aware of this and is seeking to be more responsive in certain markets. It is using its "Cash Cows" to fund development in its more dynamic markets. It is seeking to change the City's perceptions of it as a Defender to that of a more innovative company.

The model suggests that a Defender will adopt a centralised functional/line authority structure where the degree of foreign sales is low, and an area division structure when the degree of foreign manufacturing is high. This structure is hypothesised because of its efficiency and lack of duplication of functions. In this case, however, the company has adopted a divisionalised structure based upon product group. This allows the company to follow the products world wide. Commenting on this the Group Planning Manager said that you must allow your companies to be driven by the products which the markets want. A product division structure also allows economies of scale and the pooling of resources in the production of each type of product thus leading to lower costs. This saving may well outweigh the inefficiencies caused by duplication of functions. (The Group Planning Manager confirmed that the product group structure was to allow the pooling of resources and consequent economies of scale.) Also, the need to develop a product strategy at Divisional level to meet the Groups financial objectives is facilitated by a Sub-divisional structure based upon products. This allows the Group to devolve profit responsibility to divisions: freedom to manage within a framework. A further reason for not adopting a functional structure could be the company's desire to develop its younger managers. The Chairman, writing in the 1987 Annual Report emphasises this objective, "....the need to develop our younger managers whose tremendous efforts and achievements over the past twelve months augur extremely well for the future." A functional organisational structure does not promote the development of younger managers: a Divisional structure is required for this.

5.4.6. Conclusions

In the above, the proposed model has been used to interpret the position taken by the company in response to the business environment. In particular, the slow rate of change of the business environment and the company's degree of pro-activity towards that environment pointed towards an Defender strategy. The subsequent analysis has revealed a consistency between the hypothesised control attributes of this strategy and those used by the company. The match of the attributes of Company 3 to the proposed model are illustrated in Figure 5.3. The Group Planning Managers commented that this was not surprising, "If we were to adopt an inappropriate position we should end up in trouble!" Also commenting on their position on the Goold and Campbell model, he categorised the company as Financial Control.

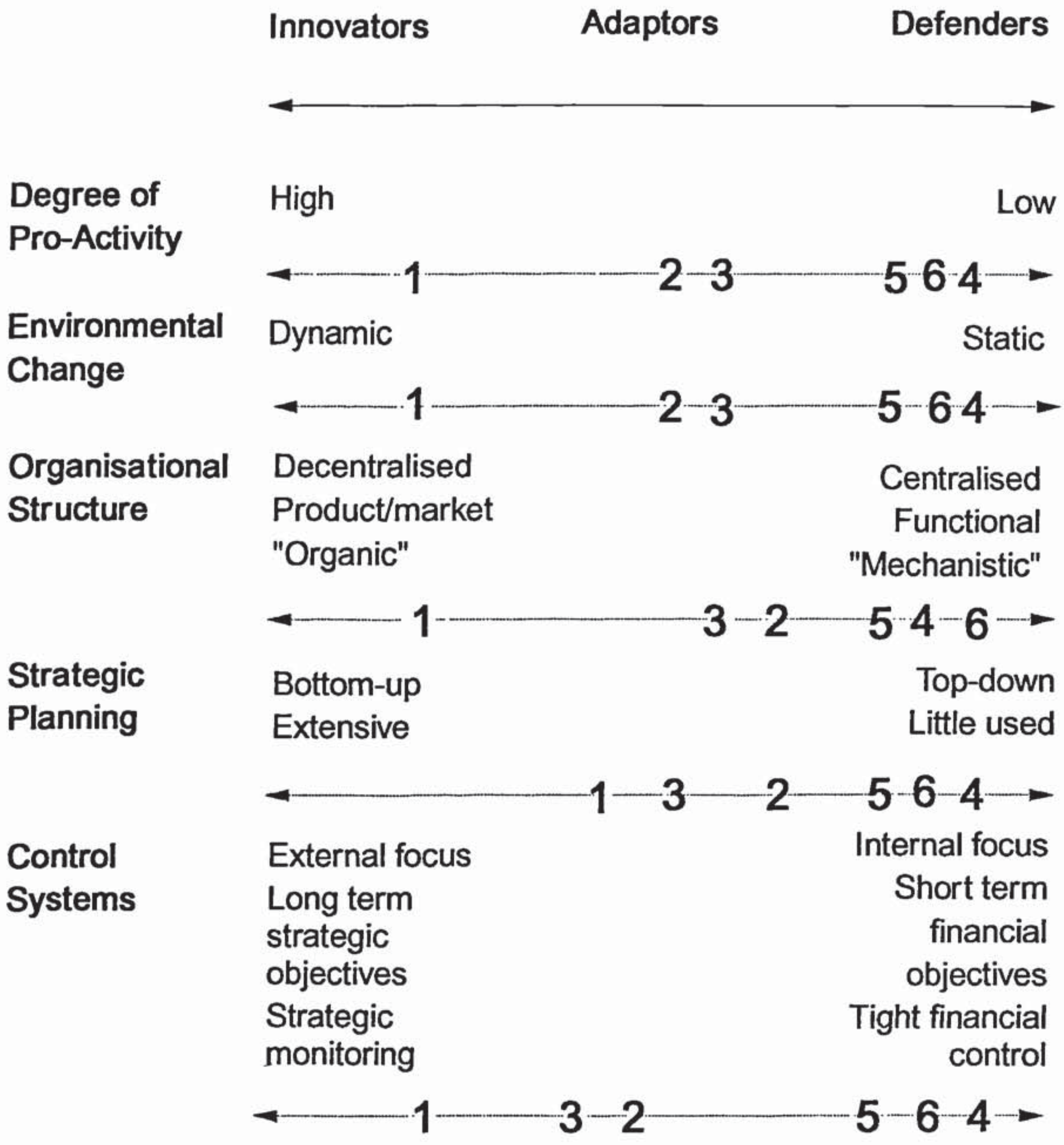
It can be seen that the company's pattern has a good fit to the proposed model in terms of the adoption of an Defender strategy in response to a relatively stable business environment, the adoption of a top-down strategic planning system, and the use of short term financial objectives as the main system of control. The fit is less good in the area of organisational structure. This "Adaptor" organisational structure is facilitating the adoption of more innovative strategies for the newer divisions which operate in less mature markets.

Commenting upon the "Pattern Matching" the Group Planning Manager preferred to place the company's divisions individually on the diagram. This placing is given in Figure 5.4. This is his perception looking from Group HQ based in the UK but does indicate that the older company divisions (4, 5, 6) operating in stable markets are "Defenders" whereas the newer divisions of the company (1, 2, 3) operating in growth markets are more "Adaptors" or "Innovators". This is supportive of the proposed model but at divisional level. It also suggests a potential area for future research i.e. the application of the proposed model to divisions rather than at group level.

Figure 5.3 Pattern Matching of Company 3 to Proposed Model

	Innovators	Adaptors	Defenders
Degree of Pro-Activity	High		Low
Environmental Change	Dynamic		Static
Organisational Structure	Decentralised Product/market "Organic"		Centralised Functional "Mechanistic"
Strategic Planning	Bottom-up Extensive		Top-down Little used
Control Systems	External focus Long term strategic objectives Strategic monitoring		Internal focus Short term financial objectives Tight financial control

Figure 5.4 Pattern Matching of Company 3 to Proposed Model at Divisional Level



5.5. Company 4

Within the past three years the company has undergone significant organisational change as a result of one important sector of the business becoming independent. The resultant organisation structure is flatter than hitherto as the organisation is now more homogeneous in the nature of its activities than before. It was commented, "It is surprising how quickly the old ways of thinking are changing to the new situation..... The two sides of the business had steadily grown apart and the original concept of benefits flowing from 'verticality' had ceased to be relevant. As the business grew apart there was also little cross-fertilisation between them. It was better to let the markets determine how well they were doing as separate businesses in their own separate markets".

The company has a turnover of approximately £2,000 million, net assets in excess of £800 million, employs 23,000 people world-wide, and has spent approximately £38 million on Research and Development in the current year.

5.5.1. Strategic Typology

Business Environment

The company operates in an industry where there is a major emphasis on product innovation to meet customer's present and future needs. The company is subject to rapid technological change and increased competition from oversees manufacturers. Competition is based upon quality and meeting customers' requirements rather than primarily price. The proposed model suggests that a company which seeks to be successful in this type of business environment should adopt an Innovator strategy, i.e. be very pro-active and seek to promote change rather than adopting to it.

Business Strategy

In the 1991 Annual Report and Accounts the Chairman stated, "We are investing for organic growth, reducing our exposure to adverse cyclical effects in capital intensive industries, and accentuating wherever possible our ability to compete on non-price factors." The review of operations within the 1991 Annual Report states, "The ability to transfer technical competences and core technology from one market application to another... is central to the Group's Research and Technology activities.... Interaction with external sources of technology such as universities has grown as the assessment of academic work for its relevance to market applications becomes increasingly beneficial.... New laboratories have been opened to serve appropriate businesses in the UK and USA." The report continues, "Important as these developments are, however, in-depth understanding of the technical fundamentals of a product or the process by which it is made remains the essential bed-rock for the longer term. Strategic research of this kind has therefore continued to be the subjects of significant attention..... Such research is vital to (company name) future."

In the 1992 Annual Report the Chief Executive writes,"..... our objective is to be amongst the leading companies in the markets in which we participate...... (Company name) is overwhelmingly a management and technology centred organisation....."

Each division of the business (known as Management Groups) regards technology as a key element of their strategy. As noted in the 1991 Annual Report, "(Management Group name) concentrates on the development of a strong international positions in specialist markets which are technically demanding and require high levels of service....

(Management Group) must therefore meet the exceptional standards of quality and performance demanded by that market."

Conclusions

The proposed model suggests that a company which seeks to be successful in the type of business environment in which the company operates i.e. a major emphasis on product innovation, rapid technological change, should adopt a very pro-active stance to that environment and seek to promote change rather than adopting to it, i.e. an Innovator strategy. The company does adopt such a strategy, seeking to differentiate itself by being at the forefront of technological development and by providing a high level of service to its customers.

5.5.2. Organisation Structure

The organisation structure consists of the Main Board and a Group head office and five Management Groups. In all cases, except one, the chairman of the Management Groups is a main board director. The Management Groups are not legal entities but represent a grouping of businesses on a business market or technology basis. The five Management Groups are organised on product lines. Each Management Group contains a number of 'Direct Reporting Businesses' (DRB's). There are some 20 of these at present and they represent the smallest operating level unit looked at in terms of routine reporting. Each is regarded as a fully integrated and coordinated business which is expected to stand on its own in all aspects except finance. Within some of the Management Groups there is a matrix form of organisation.

The organisational structure adopted by this company has reduced the scope for corporate involvement in managing linkages between businesses and in seeking synergy between them. This appears to have been a conscious decision in order to create a greater sense of independence in the businesses.

The proposed model suggests that the above organisation structure is entirely consistent with an Innovator strategy: decentralised, product/ market focused with possible matrix structures. Such a structure allows flexibility and responsiveness to changes in the market. It promotes the flow of product information and helps the company to be responsive to local market needs. This type of structure also promotes the development and communication of strategy from the bottom of the organisation to the top i.e. it encourages emergent rather than imposed strategy.

5.5.3. Strategic Planning

The responsibility for the production of plans lies with the business units with the exception of one unit which is very involved in Europe. This means that there are 20 different plans; these are formulated by the DRB's in consultation with the management groups plus some outsiders where advice is needed in technical areas. The Chairman commented that "The corporate level acts as a detached but sympathetic 100% shareholder. The HQ is not judging the content of strategic plans. We judge the process, how the plans were put together. At the centre our role is to enforce quality standards in strategic thinking and we have a role in helping educate and develop managers." This bottom-up process of plan formation is entirely consistent with the company's strategy of Innovation as it facilitates the emergence of strategy from within the organisation.

The group have no fixed view of what is long-term. Some DRB's plan for three years, others for five. Generally there is very little detail given in these plans: they are part of a continuing dialogue and reflect a company culture of avoiding too much formal planning. The long-term planning objectives are seen as concerned with refining the long-term potential of the business but, it was commented, "this does not mean a collection of woolly thoughts". It is not a process of accept/reject done at a particular point in time. The strategic planning system is thus used as a vehicle to promote discussion about the long term prospects of the business rather than as a necessary process to be undertaken annually.

Generally, but not always, the long term plans are up-dated on a once a year basis. However, updates may be compiled more or less frequently as necessary: the process would not be gone through just for the sake of it. Previous plans are scrutinised to see how far they diverge from actual. The Finance Director's experience was that the reasons for divergence can sometimes be 'alarming', arising, for example, from 'mindless extrapolation' of the past without attention being given to the dynamics of the business. The company would certainly look further into such cases to judge the quality of the management's thinking and 'draw conclusions'. Ideas and proposals for the long term plans may come both from top management as well as the DRB's. Targets may vary but are not expressed as firm i.e. they are indicative in nature. The company have thus sought to avoid the danger of the planning process becoming part of the bureaucracy by not keeping to a set pattern of reviews. When reviews are undertaken they are seen as necessary and the resultant plans as vital measures of future performance.

Annual budgets are prepared but they are set within the context of the strategic planning process. The intention is to encourage business managers to think strategically but to establish budget and cash flow goals which can provide the basis for tight controls. The annual plan is formally couched in financial terms and can be regarded as financially oriented. It is derived via a bottom-up process, though top management do give clear guidance on objectives, so that plans are formulated with people knowing what is expected of them. Group expect budgets to be sensible, credible and stretching. Some non-financial targets/measures are presented, for example, volume of production required by product groups. However, these targets cannot be applied across all companies since there is no common measure available.

The proposed model suggests that the above strategic planning system is supportive of the company's Innovator strategy: fairly short time horizons, frequent reviews but with longer term strategic objectives. The planning system is not as complete or extensive as the model suggests, the company culture being to avoid too much formal planning.

5.5.4. Control Systems

Evaluation and Monitoring of Strategy

As noted above, the strategic review process is not regarded as just a once a year exercise but as part of the ongoing monitoring of the business. Comparisons are made between the previous and revised plan and any differences are investigated. As quoted earlier, "The company would certainly look further into such cases to judge the quality of the management's thinking and 'draw conclusions'." The plan is thus regarded as a commitment by DRB management to fulfilling the business objectives not a routine exercise which has little value. Thus the evaluation and monitoring system is used as a vehicle for organisational learning, seeking to promote a longer term perspective by managers. By conducting a thorough review of previous plans the Group management underline the importance of a proficient future perspective by management.

The strategic control process within the company was seen as dependent upon financial results, interpreted against a broader background of the strategic process. The chairman believed that, ideally, specific strategic objectives should be set for each business as a part of the control process, but there was a general view in the company that identifying milestones, particularly for measures of competitive position, was extremely difficult.

Objectives

The company's objectives are formulated along traditional lines: To maximise share-holder value, reflected by a share-price which is growing faster than the market average.

The disaggregation of this objective is to DRB's rather than Management Groups. Objectives are expressed in terms of:

1. Return on Capital Employed
2. Return on Sales.
3. There is a desire to improve the utilisation of capital employed generally and working capital in particular.

Non-financial objectives are given to DRB's, but they cannot be applied uniformly to each one. This is because not all are germane to each business, for example, size of market share varies greatly between DRB's and some markets are fragmented and difficult to define and it is thus difficult to supply a single, representative, market share measure. Management are also concerned that market share may be sought for its own sake.

The company has been moving away from a multiplicity of very detailed and extensive control objectives and are seeking to focus on a small number of key targets. Profit and cash flow targets are set for divisions rather than individual businesses so that the divisions have greater discretion to manage as they see fit and to make trade offs between businesses reporting to them providing the overall performance is within target. The Chairman referred to this as "control to get things done, not to stop them from being done."

This use of financial objectives is at variance to the proposed model which suggests that Innovators will emphasis long term subjective performance measures rather than short term financial ones. The emphasis on financial controls may seem to be at odds with the emphasis from the Chairman for managers to develop better strategic thinking, and indeed a manager of one of the growth businesses perceived a conflict between business building objectives and control targets. It may be that, as proposed by Dent (1990), that the autonomy granted to lower levels of management may lead to over-zealous experimentations and that the senior management of Company 4 are using their financial control systems to keep the risk taking of managers within acceptable limits. Also, that the wide scope of the company's operations may have encouraged the use of financial controls as a common denominator, particularly before the Group was split (see Company Background). This may well be partly a legacy of the previous organisation and also of financial difficulties in the late 1970's which resulted in the imposition of strict cash targets across all businesses.

Performance Monitoring

Following the organisational change three years ago the company moved rapidly away from measuring businesses' success in terms of earnings per share towards the use of more conventional measures: Return on Capital Employed and Profit to Sales together with treasury and working capital management. Previously a full set of accounts were required from each DRB.

The Return on Capital Employed target percentage is self-generated by the DRB's i.e. no minimum or expected figure for attainment is given by the Group, although the budgetary process gives an indication. Managers are also measured in terms of various operating ratios (the DuPont Scheme) but value added ratios are regarded as especially important e.g. value added per employed.

The Main Board receives some half-dozen pages of financial detail for the group as a whole, mainly dealing with sales, profits and cash flow, down to the level of the management accounts. They also receive written reports from the Managing Directors of DRB's and the Chairman of the management groups supporting the financial detail. The financial data includes comparisons for the month and cumulative of actual results against budget and previous year figures, related to sales, costs, operating profits (and percentages) working capital movements (including stock, debtor, creditor) and cash/borrowings together with some variance analysis. In addition to monthly financial reports, there are also quarterly updates of forecasts to the year end. Each year is separate i.e. forecasts do not roll-over one year ahead continuously.

Much of the 'control' function is exercised by the main board 'keeping in touch' rather than through a lot of formal meetings. Head office management expect advance warning if results are likely to be poor, and this could lead to meetings to sort things out, initially at least with the management groups.

There is a lot of contact with the DRB's on matters underlying the results, such as sales volumes, operating costs, personnel, special projects. This contact increases around the budget setting time. The company as a whole takes the approach that when plans/budgets show things to be going wrong or have gone wrong that the first move is to invite the Managing Director of the unit in to talk things over and to set-up an action plan. Ultimately, the DRB management have the responsibility to see things are put right.

The company's considerable commitment to financial objectives is perhaps balanced by a move towards a variety of softer, more people oriented judgements. The tendency is to de-emphasize the more formal monitoring systems and replace them with informal "chats". To manage through people rather than formal systems. Informal control processes are seen as ultimately more valuable then more formal objective setting and monitoring. The company would like, in principle, to see its informal controls enhanced by explicit milestones and objectives, but sees the practical costs and difficulties of such an approach as being too great.

The monitoring of performance is thus fairly tight, with a careful watch being kept on short term performance. This is at variance with the proposed model which suggests that a company which has adopted an Innovation strategy will emphasis long term rather than short term objectives and performance measures. There is some emphasis on forecasts, as with Company 2, but these are only updated quarterly to the year end. In this case, the monitoring systems is being used as a means of constraint or containment, rather than as a means of moving the company forward. It may be, as suggested by Miller and Friesen (1982), that such companies are subject to innovative excess and that the financial control systems are used to contain the expenditure and to ensure profitability. This use is also consistent with the work of Simons (1987) who found that innovative companies (Miles and Snow's Prospectors) seemed to attach a great deal of importance to forecast data, setting tight budget goals, and monitoring outputs carefully.

5.5.5. Commentary

This case illustrates the strategy and control systems adopted by a company in a rapidly changing environment which has adopted a strategy of technological innovation in product development and production methods. In terms of the proposed model, a company which operates in a rapidly changing environment and which has a high level of pro-activity to that environment has been described as an Innovator i.e. a company which has not only sought to adapt to the rate of change of the environment but which actively promotes change by its innovation.

It was suggested that a company adopting an Innovation strategy would require an organisation structure which promoted the flow of product and market information from the individual business units to the group management but which allowed rapid response to changes i.e. a decentralised product/market or matrix structure. In this case the company has adopted such a structure and has allowed a high degree of autonomy to the DRB's due to their different products and markets. This allows each DRB to respond to changes in the market without first obtaining a decision from Group.

As suggested by the proposed model, the company uses a bottom-up mode of strategic planning with a fairly short time horizon and frequent reviews. The process is extensive within the Management Groups but is flexible in terms of the information required by Group. The longer term strategy of technological innovation is set within a framework of shorter term financial performance criteria. These are not seen as fixed, no minimum or expected figure for attainment being given by Group.

Control by group management is exercised when necessary rather than on a rigid monthly or quarterly basis. Some emphasis is placed on non-financial measures but not as much as suggested by the proposed model. The emphasis is on ensuring that the DRB's remain within budget rather than an the achievement of the longer term strategy. A reasons for this could be the relatively recent change in the group organisation which previously had emphasised financial performance criteria i.e. earnings per share, and the lack of change in senior management over this period which has resulted in old methods being retained. Alternatively, it could be argued that a company which seeks to invest heavily in Research and Development must keep a tight hold on financial performance in order to be able to generate sufficient funds. Also the need to generate new funds from the market may necessitate a shorter term view of performance.

5.5.6. Conclusions

In the above, the proposed model has been used to interpret the response of the company to a high rate of change in the business environment. In particular, the rate of change of the business environment and the company's degree of pro-activity towards that environment pointed towards an Innovator strategy. The subsequent analysis has revealed a consistency between the hypothesised control attributes of this strategy and those used by the company. The match of the attributes of Company 4 to the proposed model are illustrated in Figure 5.5.

It can be seen that the company's pattern has a good fit to the proposed model in terms of the adoption of an Innovator strategy in response to a rapidly changing business environment, the adoption of a decentralised divisional organisational structure and the adoption of a bottom-up strategic planning system. The fit is less good in the area of control systems. This is seen as being because the Group management are using these systems to control the rate of innovation and thus prevent innovation excess i.e. it is being used as a means of containment rather than of organisational learning, where the control system is used to promote a strategic perspective within the company. The control system can be seen as a balance to the longer term thrust of the strategic planning system.

Figure 5.5 Pattern Matching of Company 4 to Proposed Model

	Innovators	Adaptors	Defenders
Degree of Pro-Activity	High		Low
Environmental Change	Dynamic		Static
Organisational Structure	Decentralised Product/market "Organic"		Centralised Functional "Mechanistic"
Strategic Planning	Bottom-up Extensive		Top-down Little used
Control Systems	External focus Long term strategic objectives Strategic monitoring		Internal focus Short term financial objectives Tight financial control

5.6. Chapter Summary

In this chapter the proposed model has been used to analyse four companies and their response to the business environment. Companies 1 and 2 illustrated the use of control mechanisms to both enable and promote change within an organisation in response to changes in the business environment, whereas Companies 3 and 4 illustrated the use of control systems by companies which had a set strategy in response to a relatively unfluctuating rate of environmental change.

Company 1 changed from a Defender strategy with associated low response capability to changes in the business environment, to that of an Innovator with the capability of adopting to and indeed promoting changes in that environment. In order to implement the new strategy the company was reorganised into two business streams, with an associated move towards the decentralisation of previously centralised functions. The aim was to become more responsive to the market by allowing decisions to be made lower down the organisation. In addition, the disposal of non-core businesses allowed the company to focus on its core markets and to become more responsive to them. The strategic planning system became much more extensive with an in depth annual review of strategy by all levels of the company, whereas previously it was primarily a central function. The development of the plan was now from the bottom up whereas previously it was top down with little input from lower levels of management. Prior to the change in strategy the company's management used mainly short term financial measures of performance to control the business. Since the adoption of a more innovative strategy the move had been towards the use of more long term measures of performance, with the evaluation of strategy being based upon the Net Present Value of projected cash flows. However, short term performance was still measured in financial terms, with the annual budget playing a key role. These changes were seen to have enabled the company to become more pro-active in response to its environment and to lead change rather than having to defend against it i.e. to become an Innovator. The monitoring systems had, however, lagged behind these changes due to the inertia of the senior management to let go of reporting systems which in the past have served them well but which in the future it was thought might well hinder them.

<u>**Company 2**</u> illustrated the changes a company operating in a previously stable environment had made in order to respond to environmental legislation which had promoted an acceleration in the rate of technological change. Changes had moved the company from a Defender strategy towards that of an Adaptor with more capability to adapting to changes in the business environment. The strategic planning process was changed from top down to one which was top down in terms of guide-lines and strategic objectives and bottom up in terms of the detailed plans. This had allowed the strategic business units a degree of autonomy whilst ensuring that their strategies fitted in with the overall group strategy. The changes in the control systems were those which were anticipated but were made more slowly than expected when compared with the changes in organisation structure and strategic planning. It was only within the last two years that the emphasis had moved away from the detailed analysis of historic financial information to forecast financial and non-financial information. It appeared that there had been some inertia within the company in making these changes. However, within the past two years the focus of the control system had changed so that more emphasis was placed upon the forecast of future prospects rather on the analysis of past performance. It was observed that the Group had began to use the control system as a tool of organisational learning to promote a strategic perspective within management.

Company 3 illustrated the strategy and control systems adopted by a company in a relatively stable environment with consequently little need to be responsive to change. The focus of the company's strategy was short term financial returns and sustaining growth in earnings per share. Contrary to the proposed model, which suggested a functional/line structure for this type of company, the company had adopted a divisionalised structure based upon product group. As a possible explanation for this it was suggested that the variety of technologies employed by the company within its product ranges necessitated a product division structure to allow the required economies of scale and the pooling of resources in the production of each type of product, thus leading to lower costs. It was thought that this saving outweighed the inefficiencies caused by duplication of functions. Also, that the need to develop a product strategy at Divisional level to meet the Groups financial objectives was facilitated by a Sub-divisional structure based upon products. This structure was also facilitating a more innovative strategy in those divisions which operated in less mature markets. The company had made little or no use of strategic planning, the main emphasis being on the achievement of centrally determined financial goals within a general strategic direction. The monitoring system was also short term in perspective, being based on the monthly reporting of financial performance.

Company 4 illustrated the strategy and control systems adopted by a company in a rapidly changing environment which had adopted a strategy of technological innovation in product development and production methods. The company had adopted an organisation structure which promoted the flow of product and market information from the individual business units to the group management and which allowed a rapid response to changes i.e. a decentralised product/market or matrix structure. The company used a bottom-up mode of strategic planning with a fairly short time horizon and frequent reviews. The process was extensive within the Management Groups but was flexible in terms of the information required by Group. The longer term strategy of technological innovation was set within a framework of shorter term financial performance criteria. The emphasis was on ensuring that the DRB's remained within budget rather than an the achievement of the longer term strategy. One reasons for this was given as the relatively recent change in the Group organisation which previously had emphasised financial performance criteria and the lack of change in senior management over this period which has resulted in old methods being retained. Alternatively, it was argued that a company which sought to invest heavily in Research and Development had to keep a tight hold on financial performance in order to be able to generate sufficient funds. The need to generate new funds from the market may have necessitated a shorter term view of performance.

In each case the company responded to its business environment by adopting the strategy proposed by the model. In the case of Company 1 the organisational structure was changed to enable the degree of information processing required to take place, whereas for Company 2 the organisational structure had already been changed. Company 3's organisation structure was enabling some of its divisions to adopt a more innovative strategy. The cases illustrated the expected form of strategic planning systems: top-down and/or bottom up, and its expected degree of use: little to extensive. This was seen as a mechanism for promoting organisational learning when the company was moving from a relatively re-active stance to the business environment to being more pro-active. The conflicting opinions in the literature regarding the use of financial control systems was also found in the cases. Company 4 in particular used short term financial controls despite it having adopting an Innovator strategy. This lack of conformity to the expected model will be further explored in the chapter 6 where the various uses of the financial control systems will be discussed and possible modifications to the model proposed.

Chapter 6: Summary, Discussion of Propositions and Conclusions

6.1. Summary

This research has concentrated on the links between the strategies adopted by companies and the mechanisms used to control the organisation. This has not been seen as a one way process with the control system following from the strategy but rather as an interactive process between the control systems, the environment and the business strategy. The research has not attempted to derive causal laws which are able to be generalised but has looked at specific associations between various aspects of strategy and strategic control. The purpose was to further our understanding of these relationships. A model was proposed which linked the rate of change of the business environment and the degree of pro-activity of the business to that environment with the business strategy, organisational structure, strategic planning system, and management control systems.

The first part of chapter 2 reviewed the literature on the various aspects of strategy: strategy formation, decision making, and strategic change, including the various understandings of the strategic process in order to provide a basis of understanding for the subsequent investigation. It was concluded that there is a general agreement amongst researchers that strategy is concerned with the alignment of a business to its environment but that there were a number of viewpoints and differences in emphasis. Such differences should not be seen as dichotomous but rather as the two extremes of a continuum which are sometimes able to coexist within the same organisation. Some viewed strategy as being intended and constructed before the event, others that it emerged from the stream of decisions made by management. Some saw it as a rational process whilst others viewed it as incremental and disjointed. It was seen by some as a way of enabling a company to respond to its environment whereas other saw it as one of the causes of inertia to change. It could be a mechanism which enabled a company to take a new perspective on its environment but it could also act as a filter to new information and confirm a company in its present position.

The second part of the chapter reviewed the literature on strategic typologies. It was found that there were a number of typologies which at first inspection appeared to be mutually exclusive. Rather than choose one of these typologies for the subsequent analysis, it was decided to attempt to provide a synthesis which drew out the differences and added to the richness of the analysis. From previous research a number of tentative links between the various typologies were explored. In particular, the dimensions of Business Pro-Activity and Environmental Change was used to show a tentative correspondence between the typologies of Mintzberg (1973), Miles and Snow (1978) and Porter (1980). It was subsequently proposed that these two dimensions provided a plausible explanation of the reasons for the need for different strategies in order to be successful in different business environments. A model incorporating these two dimensions was proposed as a synthesis of the three typologies.

The third part of chapter 2 reviewed the literature relating strategy and structure, strategy and planning, and strategy and control in order to validate and extend the proposed model along these dimensions. The literature on strategy and structure suggested strong links between a company's strategy and its organisational structure but weaker evidence for the specific type of structure adopted. It was found from the literature on strategic planning that the main contingent variables for the determination of the system were business environment, technology and organisational structure, and that these same variable also linked strategy to strategic planning. In the area of control, a number of links were found between the strategy adopted by a company and its control systems. In particular, the work of Simons (1987, 1990) was used to provide an explanation for management's use of control systems. An analysis of the work of Goold and Campbell also revealed close links between their strategic control styles and the proposed typology.

During the course of chapter 2 a number of propositions were made regarding the relationship of company strategy to the business environment and company strategy to the management control systems used to implement and control that strategy. Chapter 3 provided a statement of these propositions together with a definition of the scope of the current research.

A model (illustrated in figure 2.6) was proposed which linked these various aspects of strategy and organisational control: Innovators were described as those companies which were very pro-active towards their business environment, seeking to promote change rather than responding to it; Adaptors as those companies which took a less pro-active stance preferring to adapt to change rather than promote it; and Defenders as those companies which sought to resist change.

Chapter 4 was concerned with the methodology to be used to investigate the above propositions. Due to the nature of the research, which was primarily concerned with how and why companies adopt certain strategies, it was considered that case studies would be used in an explanatory way to further our understanding of the variables which affect strategy and strategic control and how these variables fit together functionally. The method of case comparison (Yin 1981) was used to test the propositions against four company case studies. The research has attempted to provide explanations for any differences between the proposed model and the observations made. The limitations of the current study were recognised and the consequent need to qualify the research findings. In particular the limits to generalisability of qualitative research, the inherent bias in the data, the difficulty of strict replication, and the limitations of using only one researcher with a particular bias (Accounting). Despite these qualifications, the research method adopted has yielded useful insights into the strategy adopted by companies and their choice of mechanisms to control those strategies. By seeking to order the seeming confusion of the cases by fitting them though one view of reality (the model), dissonances were made cognizant for further investigation and analysis. In the conclusions, possible modifications to the proposed model which provide a better explanation of the total phenomena are discussed together with alterations to the research method adopted.

In chapter 5 the proposed model was used to analyse four companies and their response to the business environment. Companies 1 and 2 illustrated the use of control mechanisms to both enable and promote change within an organisation in response to changes in the business environment, whereas Companies 3 and 4 illustrated the use of control systems by companies which had a set strategy in response to a relatively unfluctuating rate of environmental change.

<u>Summary of Cases Against the Proposed Model</u>

The use of the proposed model to analyse these cases has enabled certain features to be highlighted. Each of the cases had some aspect of its control mechanisms which did not comply with those expected by the model. For company 1 this was in the areas of strategic planning and control systems, and was seen to be due to a certain degree of organisational inertia. Within company 2 the fit was less good in the areas of organisational structure and control systems. This was seen as being because the Group management were using these systems to promote change and organisational learning. According to the model, this was seen to have the effect of making the company more responsive to changes in the market and thus promoting the emergence of a more innovative strategy. For Company 3 the organisational structure again did not conform to that expected by the model. This was seen as being because the Group, in pursuing a lowest cost producer strategy, have organised in product divisions in order to promote economies of scale and the pooling of resources in the production of each type of product. The control systems within Company 4 did not conform to those expected by the model. This was seen as being because the Group management were using these systems to control the rate of innovation and thus prevent innovation excess i.e. it was being used as a means of containment rather than of organisational learning. The control system was seen as a balance to the longer term thrust of the strategic planning system.

In the following discussion the reasons for these observed differences between the proposed model and the cases will be further explored and possible modifications to the model proffered for consideration.

6.2. Discussion of Propositions

In this section each of the propositions will be examined in the light of the cases. In addition, the usefulness of the model as a framework for analysing the interaction of the business environment, company strategy, and organisational control systems will also be examined. During the course of this study, it has been observed that the strategy adopted by a company is as a result of a number of factors and should not be seen as an isolated event divorced from the context of the business i.e. the environment in which the company operates, the existing organisational structure which, amongst other things, is a major determinant of the information processing ability of the company, the strategic planning system which can guide strategy formation and implementation and the control system which can be used to both promote and inhibit change. These systems have been seen to interact by providing checks and balances to each other and to mediate the company's responsiveness to changes in the business environment. Strategy, it was observed, is a response to changes in the business environment and the company's systems are the mechanisms through which the environment is observed. A company responds according to its view of reality. If the mechanisms for viewing that reality are inadequate then the company's response may well be inappropriate. These mechanisms can both lead and lag the changes in strategy. The proposed model, derived from the literature, has sought to provide a framework for analysing these interactions and whether the mechanisms are acting to promote the change or are resisting it.

6.2.1. Business Pro-Activity and Environmental Change

In each of the four cases the company responded to its business environment by adopting the strategy proposed by the model (see figure 2.6), all be it with some fuzziness.

Company 1 operated in an environment where the rate of change had altered gradually from being relatively low to being relatively high i.e. from there being little product innovation and changes in consumer tastes to there being a need for product innovation to maintain market position. This had been partly due to market forces but was also due to the company's decision to compete on quality and product innovation i.e. the company has promoted change. The company had needed to respond earlier to changes in the business environment but organisational inertia, particularly that of senior management, had prevented these changes taking place. Following a change in the Chief Executive the company had responded to changes in its business environment by adopting an Innovator strategy, seeking to differentiate its products by innovation and quality. This change in strategy is supportive of the proposition that companies which wish to be successful in a rapidly changing environment need to adopt a pro-active stance to that environment, seeking to promote change rather than responding to it.

Company 2 had been subject to very little change, the markets being characterised by mature products and no new competitors. However, recent government environmental legislation had promoted an acceleration in the rate of technological change within the industry. As a consequence, the company had had to undertake a programme of product development. Thus the rate of change of the environment had increased from practically static towards more product innovation. The company had responded to the increase in the rate of change of the business environment by becoming more pro-active. It had not sought, like Company 1, to promote change within the business environment i.e. to be an Innovator but rather to respond to change i.e to be an Adaptor. Its focus had been more towards differentiating its products in terms of quality, reliability, delivery and after sales service, rather than product innovation, although some innovation had been necessary due to Government legislation and the move towards more environmentally friendly designs. Thus an increase in the rate of change of the business environment had promoted a change of strategy, the company becoming more pro-active in response.

Company 3 operated in an environment which, in term of competitors and products, was stable with a relatively slow rate of change. The company's strategy, in response to this environment, was to be the lowest cost producer in its core businesses. It did not set product/ market strategies for its divisions but requires them to operate within strict financial guide-lines. The drive was not towards product innovation but product stability although it was seeking a more innovative stance in its newer markets due to the threat of increased environmental change (see Figure 5.4). Such a response to a stable environment is supportive of the proposed model.

Company 4 operated in an industry where there was a major emphasis on product innovation to meet customer's present and future needs. The company was subject to rapid technological change and increased competition from oversees manufacturers. Competition was based upon quality and meeting customers' requirements rather than primarily price. The company sought to differentiate itself by being at the forefront of technological development and by providing a high level of service to its customers. In response to a rapidly changing environment it had thus sought to be pro-active i.e. it had adopted an Innovator strategy, seeking to be at the forefront of change rather than having to adopt to it.

Although not to the same degree, each of the cases is supportive of the proposition that the dimensions of Business Pro-Activity and Environmental Change provide a plausible explanation for the reasons why companies need to adopt different strategies in order to be successful in different markets. Company 1 responded to an increase in the rate of change of the business environment by changing its strategy from Defender to Innovator. Similarly, Company 2 responded to an increase in the rate of change of the business environment by changing its strategy from Defender to Adaptor. Company 3 which operated in a very stable environment adopted a Defender strategy (although a more innovative strategy is now being required due to changes is legislation and increased competition) whereas Company 4 which operated in an environment which was subject to a rapid rate of change adopted an Innovator strategy. The changes in strategy made by Companies 1 and 2 were made in conjunction with corresponding changes in the control systems, so that they could become more responsive to changes in the business environment. This was necessary in order to support their more pro-active strategies, whereas Companies 3 and 4 had made few changes to their control systems. Company 2 had used changes in its control system to promote organisational learning in order to increase its responsiveness to change.

6.2.2. Organisational Structure

The cases showed some variation from the proposed model.

Company 1's change from Defender to Innovator promoted a change in organisational structure, as suggested by the proposed model. When the business environment was relatively stable, a functional /line organisation structure was able to offer the required degree of information processing ability. With the change in strategy towards a more pro-active stance and its associated need to be in touch with changes in consumer preferences, the previous organisational structure proved inadequate. As suggested by the model, a strategy of Innovation required that the company change to a product or market focused strategy in order to promote the flow of product/ market information to management and thus increase responsiveness. This ability to respond to changes in the business environment was also enhanced by the decentralisation of control, giving more autonomy to business stream management.

Company 2 changed its organisation structure prior to the change in company strategy, rather than it being a consequence of it. The change was made to promote efficiency in the management of assets and to increase the commitment of line management. The change, however, also promoted the flow of product information within the organisation and increased its ability to respond to changes in the environment. When the changes were required the company was in a position to respond appropriately. This is supportive of the proposal in this research which suggests that an appropriate organisational structure is required to promote the flow of product/ market information within an organisation and thus influence the formation/ emergence of strategy. Without such a structure the information available to management is limited and thus an appropriate response to environmental change may not be made. The previous functional structure, although efficient in terms of cost, was inappropriate in a changing business environment as it did not have the required degree of information processing capability.

Company 3 were seeking to become more strategically focused and responsive to the market. The proposed model suggests that the organisational structure of Company 3 was able to provide the necessary information processing capability required for a more pro-active strategy, but that other systems would also require changing e.g. Strategic Planning and Control, before the company could become more strategically orientated. The model suggests that it is these systems which need to be used to direct management's attention onto more long term issues. The divisional structure was enabling the divisions which operated in less mature markets to adopt a more innovative strategy. Figure 5.4 illustrated the variety of organisational structures adopted by the various divisions in their respective environments. Those divisions which operated in relatively more dynamic environments tended to be those which adopted a more decentralised organisational structure whereas those in relatively stable environments adopted a more centralised, functional structure.

Company 4's organisation structure was entirely consistent with an Innovator strategy: decentralised, product/ market focused with possible matrix structures. Such a structure allowed flexibility and responsiveness to changes in the market. It promoted the flow of product information and helped the company to be responsive to local market needs. This type of structure also promoted the development and communication of strategy from the bottom of the organisation to the top i.e. it encouraged emergent rather than imposed strategy.

The literature suggests that there are strong links between a company's organisation structure and its strategy. Previous research has concentrated on the organisational structure which a company needs to adopt in order to implement its chosen strategy. The evidence from these cases suggests that a company's organisational structure can lead the change in strategy i.e. it can provide the infrastructure within which the strategy can emerge by providing the necessary information processing capability. Whilst the correct structure is necessary for the emergence or implementation of a new strategy it is not sufficient i.e. it is passive and not active. Other systems are required to re-direct the management towards the achievement of the new strategy.

6.2.3. Strategic Planning Systems.

Each of the cases illustrated the expected form of strategic planning systems: top-down and/or bottom up, and its expected degree of use: little to extensive.

Company 1's strategic planning process had become a tool of management to enable them to formulate and implement strategy. Prior to the change in strategy, the strategic planning process was seen as a tool of Group management with the lower levels within the organisation having little influence, plans being imposed rather than debated. The process had now become more extensive in scope with the major influence coming from a wider cross-section of employees within the organisation. The proposed model suggests that such a change was necessary in order to promote the company's responsiveness to the environment by encouraging the flow of information from the bottom to the top of the organisation. It was also required in order to co-ordinate the various parts of the organisation which would have had a tendency to drift apart strategically due to the move towards a decentralised organisation structure and increasing autonomy.

Company 2's use of the strategic planning process was consistent with its Adaptor strategy. The process was top-down, bottom-up and was controlled by a central planning department. It differed from Company 1 in that the plans of the SBU's were reviewed and amended by Group, whereas those of Company 1's business streams were not. Both companies had strategic guide-lines set by Group, but within Company 1 this was as a result of consultation with the business streams, whereas within Company 2 the Group strategy was dominant i.e. the SBU strategies had to be supportive of it. Company 1's strategy was more emergent, whereas that of Company 2 was imposed.

<u>**Company 3**</u> had little formal strategic planning at the Group level nor were strategic plans considered of any great value. The strategic review process was top-down with very little input from the Divisions and was primarily financial in nature. This is supportive of the proposed model which suggests that Defenders will make use of strategic planning to communicate from the top down the goals of the top management, and that these goals will tend to be of a financial nature rather than strategic. At the divisional level those divisions operating in more dynamic environments tended to make more use of strategic planning, but this was less extensive than might be expected (see Figure 5.4).

<u>**Company 4'**</u>s strategic planning system was supportive of the company's Innovator strategy: fairly short time horizons, frequent reviews but with longer term strategic objectives. The planning system was not as complete or extensive as the model suggests, the company culture being to avoid too much formal planning.

Thus each of the cases is, to a large extent, supportive of the proposition that the strategy adopted by a company is a major determinant of its use of strategic planning systems. In particular, the proposal that companies which seek to be highly pro-active to their environment i.e. Innovators, will adopt a bottom-up process whereas companies which are re-active i.e. Defenders, will adopt a top down process, appears to be consistent with the cases. A bottom up process is required by Innovators in order to promote the flow of ideas from the parts of the organisation which are closest to the market i.e. it fosters the company's responsiveness to the market. The tendency will therefore be for Innovators to have a more emergent strategy, whereas Defenders are more likely to impose strategy from the top. The proposals regarding the degree of extensiveness of the planning system is also largely supported by the cases although this was seen to be also influenced by the company culture e.g. Company 4.

The evidence from these cases suggests that a company's strategic planning system can facilitate a change in strategy i.e. it can provide vehicle through which senior management can promote organisational learning. As noted above, the correct structure is necessary for the emergence or implementation of a new strategy but it is not sufficient. Other systems such as the strategic planning system are required to re-direct the management towards the achievement of the new strategy. Where the planning system lags behind that which is required to formulate and implement the new strategy the system can inhibit change.

6.2.4. Control Systems

The conflicting opinions in the literature regarding the use of financial control systems was also found in the cases.

Company 1's use of its control systems was largely supportive of the proposed model which suggested that a company adopting a strategy of Innovation would have an external focus to its control systems rather than an internal focus. However, there was a tendency to concentrate on short term financial measures of performance rather than longer term strategic ones. It was suggested that this was due to the previous Defender culture of the organisation.

Company 2 sought a balance between the short and long term performance of the company. By focussing on the forecast rather than actual performance against budget, the Group management were directing management's attention on future prospects rather than past mistakes. The model suggested that such a use of the control systems would lead to a more innovative strategy. It was suggested that the company were using their control systems to promote organisational learning by focussing management's attention on the key strategic issues. This was in contrast to Company 1 where the control systems were lagging behind the strategic direction. These two cases illustrated how a company's control systems can be used as a means of promoting and supporting the strategic direction or as an inertia to change. One possible explanation of this may be that within Company 1 the strategy was more emergent and, as a result, the Group management needed to maintain control by means of financial performance measures, whereas within Company 2 the strategy was more imposed and was therefore more supported by management. Within Company 1 the control was in terms of constraint, whereas within Company 2 it was in terms of which direction to move forward.

Company 3 were making extensive use of the financial monitoring system to control the business. In contrast to company 2, the company was using its control systems to monitor its current position rather than promote organisational learning towards a future perspective. Such a use was seen as consistent with its Defender strategy which the model suggests requires a primarily inward focus. It is interesting to note, however, that at Divisional level, those divisions which were operating in more dynamic environments had a much more external and long term focus to their control systems (see figure 5.4).

Company 4 had fairly tight monitoring of performance, with a careful watch being kept, in particular, on short term performance. Again this was at variance with the proposed model which suggests that a company which has adopted an Innovation strategy would emphasise long term rather than short term objectives and performance measures. There was some emphasis on forecasts, as with Company 2, but these were only updated quarterly to the year end. In this case the monitoring systems was seen as being used as a means of constraint or containment, rather than as a means of moving the company forward.

The evidence from these cases suggests that a company's control system can facilitate a change in strategy i.e. it can provide a vehicle through which senior management can promote organisational learning, or it can be used to constrain. Where the control system is being used to constrain, other systems such as the strategic planning system may be being used to direct the management's attention towards the achievement of the strategy. Thus one system can be used to provide checks and balances to another. Thus in Company 2 the strategic planning system was being used to promote a future perspective, whereas in company 4 the control system was being used to prevent innovative excess.

6.2.5. Comments

Following the analysis of the case studies, a copy of the main propositions of the research, together with their respective case studies, were sent to the main respondents in each company. Any comments regarding the particular companies have been incorporated into the cases. The more general comments are included here.

It was commented that Innovators will tend to be proactive and that a company needs to be an Innovator if it operates in an environment with a high rate of change. To the proposition that Innovators will have reducing effectiveness as the rate of environmental change decreases it was argued that Innovators would always be more successful than Defenders even when the rate of environmental change was low. That one of the things companies needed to do in a static markets was to introduce new products all the time. In response it could be argued that "Innovators", as used here, are those companies who were pushing change, whose primary competitive focus was through innovation rather than being the cost leader in existing products. The latter category (Defenders) still needed to innovate (make minor modifications) but that the basic product tended to remain the same. This argument is supported by Porter (1980) who argues that a company must choose between a strategy of Differentiation or Cost Leadership otherwise it become "Stuck in the Middle". A counter argument, however, is that once a company has established itself as the Cost Leader, it can use its strong position (profitability) to develop its products, thus consolidating its position even more.

In a similar way, it was argued that Adaptors were always going to be more successful than pure Defenders. That the Defender situation was a harvest strategy, getting what you could out of a business and running. In these terms Company 3 did not adopt a pure

Defender strategy as it did aim to maintain the value of its assets and keep itself up to scratch with respect to the competition. They did have one or two exceptions where they can see that there were no long term prospects so they did not want to invest. They did confirm, however, that they were Defenders in terms of not wanting things to change. They would prefer their products to remain essentially the same, although some changes had been necessary due to changes in standards.

With reference to the proposition that a company will be most successful when the Business Pro-Activity is in accord with the Rate of Environmental Change, it was commented that pro-active companies are always going to be more successful than those which are not. Quoting Sir John Harvey Jones "He wished to engender the highest rate of change within ICI that the organisation could stand". The executive said, "If companies do not change they end up dead." the argument being that it is better to be more pro-active than you need than less. A company which is less pro-active than it needs to be may well fail since it does not respond appropriately to environmental change, its strategic control systems being unresponsive to such changes. A counter argument advanced by Hannan and Freeman (1988) is that "Organisational selection processes favour organisations with relatively inert structures, organisations which cannot change strategy and structure as their environments change." Their evolutionary perspective on strategy suggests that in a competitive environment, flexibility is evolutionarily inefficient, and that the investor in long term strategies of innovation, diversification and change can always be undercut by the short term, inflexible low cost producer (Whittington, 1993).

Commenting on Defenders tending to have less flexibility of manufacturing than Innovators, an executive in company 3 said that the company always tended towards flexible manufacturing in order to be able to change the volume of product they made very rapidly. They aimed to be reactive to market conditions in terms of the volume of product demanded and always avoided individual items of plant which required a high throughput to be profitable: "That is a killer". It should be noted, however, that the flexibility was in terms of volume rather than alternative products. Contrast this with Company 1 where the flexibility was in terms of different products so that the cost of innovations which failed could be minimised.

It was commented that no company should have "one jot less" marketing information than it is capable of getting. In response, it could be argued that there is always more marketing information available and that it is always a matter of costs weighed against benefits. A company selects which information it considers useful. This will be very much determined by its paradigm i.e. its view of reality (Johnson and Scholes, 1993).

To the proposition that Innovators will tend to concentrate on longer term strategic objectives rather than short term financial ones, it was commented that financial stability was always vital, even for Innovators. In response to a description of Company 2's move from monthly reporting to quarterly reviews, the same senior executive commented, "Sell the shares in that company. Irrespective of its long range view, unless a company does itself monthly balance sheets it will loose control of its finances." In response, it could be argued that it is a matter of what the focus of the meeting is. A company can produce a wide variety of information, but what does the senior management focus on? Simons (1991) argues that it is this focus which determines the strategic emphasis of the company. That a focus on short term financial results will tend to stifle longer term strategic thinking.

A final comment was that, "Whilst models of this sort can always be justified by some examples, other example will confound them." One of the main purposes of this research was to find such (confounding) examples and to analyse the reasons for their lack of fit. These non-matching patterns are highlighted by the proposed model and can be further investigated. Without the model such non-conformity may well have remained hidden in the data. By seeking to order the seeming confusion of the cases by fitting them through one view of reality (the model), dissonances are made cognizant for further analysis.

6.3. Model Revision

In the above discussion it was noted that the organisational structure can lead the change in strategy. The structure provides the infrastructure within which the strategy can emerge by furnishing the necessary information processing capability. Although the correct structure is necessary for the emergence or implementation of a new strategy it is not sufficient. Other systems were seen as necessary to re-direct the management towards the achievement of the new strategy. It was noted that a company's strategic planning system can facilitate a change in strategy, but that it can also be an bridle to change. Similarly, a company's control system can facilitate a change in strategy, or it can also be used to constrain. These two systems can be seen as providing checks and balances to each other. In particular, an Innovator may well use its control system to prevent innovative excess, whereas an Adaptor may use the same system to promote a more innovative strategy, the constraint being provided by the strategic planning system or possibly the inherent resistance to change of the company's management. This can also be understood in terms of whether the company is changing its strategy in response to a change in the rate of change of the business environment or whether it is maintaining the same strategy. A company which is seeking to change is more likely to use both its strategic planning system and its control system to promote change in the required direction i.e. to foster organisational learning, than one which is established in its position. Such a view is supported by the work of Simons (1990) who suggests that a company's management will make certain systems interactive in order to promote organisational learning and to focus on the strategic uncertainties. Where such change is not required the system will be used in a programmed way. Figure 6.1 presents a revised model which incorporate these various dynamics.

Figure 6.1 Revised Model of Strategic Types and Control Mechanisms

	Innovators	Adaptors	Defenders
Degree of Pro-Activity	High		Low
Environmental Change	Dynamic		Static
Organisational Structure	Decentralised Product/market "Organic"		Centralised Functional "Mechanistic"
	← change enabling		
		stability enabling →	
Strategic Planning	Bottom-up Extensive		Top-down Little used
	← change promoting		
		change constraining →	
Control Systems	External focus Long term strategic objectives Strategic monitoring		Internal focus Short term financial objectives Tight financial control
	← change promoting		
		change constraining →	

The organisational structure is seen as an element of the organisation which can be either change enabling (organic structure) or stability enabling (mechanistic structure). A move towards a more organic structure increases the information processing ability of the organisation (Galbraith and Nathanson, 1979) particularly to external stimuli but tends to be more costly to operate (Miller, 1986). A move towards a more mechanistic structure decreases the organisation's responsiveness to external stimuli (Galbraith and Nathanson, 1979) but tends to be more efficient (Miller, 1986). The problem for a company's management is to strike the right balance between information processing ability (environmental responsiveness) and efficiency. It is the balance between the view that the ability to change is the only means of survival in today's business environment (Sir John Harvey Jones quoted in section 6.2.5.), and the view that relatively inert structures are the best means of survival (Hannan and Freeman, 1988).

The strategic planning system can be used both to promote change or to constrain it. An extensive, bottom up system will tend to promote the flow of ideas and opportunities (Quinn, 1979; Grinyer, 1986) whereas a top down system will tend to lock the company into its current mode of operation (Miles and Snow, 1978; Lorange, 1979; Simons, 1987). An extensive system can also be used as a means of organisational learning, re-focusing the management on future opportunities rather than current performance (Company 2). The balance here is between a top down system which promotes a common strategic direction but which can be unresponsive to change (i.e. the wrong direction: Strategic Drift) and a bottom up system which is responsive to the environment but which can lead to a lack of strategic focus.

Control systems can also be used to promote change by focussing management's attention on the long term strategic objectives (Simons, 1990) and on those critical success factors whose non-achievement could derail the strategy. The interactive use of selected control systems can guide organisational learning and influence the process of strategy making (Simons, 1991). Conversely, the control systems can be used to constrain change by focusing management's attention on the short term financial objectives. In particular tight financial controls can be used to prevent innovative excess (Miller and Friesen, 1982). The balance here is between the necessity to monitor the short term financial stability of the company and the need to promote a focus on the longer term. Too little emphasis on the short term could lead to financial difficulties and the risk of takeover, to little promotion of a longer term perspective could lead to a lack of environmental responsiveness and a consequent drop in performance.

6.4. Implications for Management and Management Teaching

In discussing the revised model (section 6.3) a number of implications for management have been raised. In particular, the need to balance:

- the ability to process and react to external information about changes in the company's environment (tendency towards an organic structure) against the need for operational efficiency (tendency towards a mechanistic structure);
- the need for a common strategic direction (tendency towards top down planning) against the need to be responsive to the environment (tendency towards bottom up planning); and
- the need to monitor financial stability (tendency towards short term financial objectives and tight financial control) against the need to promote a longer term perspective (tendency towards long term strategic objectives, strategic monitoring).

Management need to see these as an interacting system of controls which can be used to change a company's responsiveness to its environment.

The model highlights the need for management to adapt to changes in environmental dynamism by changing the company's systems. What has worked in the past under relatively stable conditions will not be appropriate for the future under increasing rates of environmental change. The model highlights the lack of fit of a company's control mechanisms to the rate of environmental change and indicates the direction it must move in order to have an appropriate amount of environmental responsiveness.

The model also emphasises the important link between company strategy and environmental dynamism and the appropriateness of each strategic type (Innovators, Adaptors, Defenders) to particular environments. It suggests that a strategy of innovation may be inappropriate in a relatively stable environment, the company which defends its position being the most successful. On the other hand, a defensive strategy in a dynamic environment is considered inappropriate and a more innovative strategy the most appropriate. The comments in section 6.2.5. indicate that this is a contentious issue which requires further investigation.

The above model has been used in management teaching at both undergraduate and post graduate level and has proved useful in conveying the interaction between the various elements of the organisational control systems. It has been found that students are able to comprehend the inherent complexity of a company's interaction with its environment and the implications for strategy development using the model. In particular the interaction of the company's environment with its strategy, organisational structure, strategic planning system and control systems which other models consider in isolation.

6.5. Research Agenda

This research has concentrated on particular aspects of strategy formation and strategic control. This focus has enabled particular aspects of this process to be highlighted and their importance investigated. Such a focus does, however, limit the scope and application of the finding.

In Chapter 4 the limitations of the research design employed in this research were discussed. The choice of a qualitative rather than quantitative research methodology has had the effect of setting limits to the ability to generalise the research findings. In particular, the results cannot be generalised to infer that all companies will behave in this way. An alternative approach would be to employ a qualitative methodology to survey a larger sample of the population for tendencies. This may well prove a useful avenue for future research, particularly in seeking to answer questions relating to the performance of particular Strategic Types (Innovators, Adaptors, Defenders) in various business environments (static to dynamic). The main problems with the employment of a more quantitative methodology are likely to be in the operationalisation of the main constructs i.e. product innovation, environmental dynamism. These problems were discussed in chapter 4.

In chapter 4 it was noted that strict replication of this type of study was not possible due to the ongoing changes within the selected companies which alter people's perceptions of past events and the (inevitable) changes in senior personnel who have different ideas and emphases. Replication is therefore only possible in terms of additional case studies and their analysis. Further case studies could be conducted into companies which operate in both relatively stable environments and dynamic environments. Of particular interest would be those companies which have responded to changes in environmental dynamism. As in the present study, the reliability of the data used to construct the cases would be enhanced by constantly checking with the respondents. In recognition that the analysis of the individual interviews and documents to construct the final case study can be regarded as a somewhat subjective process (Bailey, 1987) it is proposed to use more than one researcher in future research. In order to overcome subject bias due to the background of the interviewer, researchers from different disciplines would also be used where possible. Also, in recognition that the choice of respondents within the four companies is likely to introduce bias into the cases, interviews would be sought with the senior executives from the major disciplines e.g. marketing, accounting, production, personnel.

A potentially fruitful avenue for future research is the application of the proposed model to the divisions of multi-divisional companies. Analysis of Company 3 revealed a close correspondence between the control systems employed by the six divisions of this company and those proposed by the model. Of further interest would be the control systems employed by the Group under different circumstances: divisions in similar environments, divisions in different environment. This would draw on the similarities noted between this study and the work of Goold and Campbell (section 2.6.4.)

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Appendix A: Discussion Document

Strategy and Control Systems: Areas for Discussion

Thank you for agreeing to this meeting.

Introduction

My research is concerned with the relationship between the strategy adopted by a company and the mechanisms used to formulate and implement that strategy, in particular the organisational structure, strategic planning system and reporting system. My starting point is the business environment in which the company operates and the company's response to that environment, particularly when there are changes in the environment which prompt changes in strategy. It is therefore important to look not only at the present situation but changes which have occurred over the past five to ten years.

The following is not intended as a questionnaire but as suggested areas for discussion i.e. as an aide memoire rather than a rigid set of questions.

Company Background

Company products, markets, competitors, market position, size: turnover, number of employees (published accounts).

The Business Environment

What is the current business environment? e.g. number of competitors, degree of new product innovation, markets: home and export, general economic climate etc.

What significant changes have there been in the company's business environment over the past ten years and what has precipitated these changes? e.g. increased competition, new products, Government legislation, consumer tastes, new markets, Sterling exchange rate, E.E.C. etc.

Company Strategy

Does the company have a formal mission statement?

Is there a current theme? - e.g. quality, efficiency, customer service

How are these communicated to employees?

What is the current business strategy?

Have there been any significant changes in strategy over the past ten years, and if so what are they?

What do you consider were the main reason for these changes? e.g. changes in the business environment, new Chief Executive, takeover/ merger, changes in technology, new production methods, imposed by Group etc.

Organisational Structure

What is the current organisational structure? - home and foreign: marketing and manufacturing.

To what extent are functions such as personnel, finance, legal, computer services controlled by head office? i.e. centralised v decentralised.

Have there been any significant changes in this structure over the past ten years, and if so, what are they?

What do you consider were the main reasons for these changes?

Are there any changes proposed for the future, and if so, what are they and why are they considered necessary?

Strategic Planning

What is the current system of strategic planning?

top down or bottom up

time horizon

length of planning cycle

degree of co-ordination/ control by head office

nature of goals set: financial, non-financial, qualitative

frequency of review

What relationship does the strategic plan have to the annual plan?

Which is considered most important by company senior management and why?

Have there been any significant changes in the strategic planning system over the past ten years, and if so, what are they?

What do you consider were the main reasons for these changes?

Are there any changes proposed for the future, and if so, what are they and why are they considered necessary?

Reporting and Control Systems

What are the key measures used by senior management to monitor business performance? i.e. not just reported, but actually used: indicated usually by those which they query must often.

In what ways do the key measures used to monitor business performance relate to the company's strategy?

What practical evidence is there to support this relationship?

What is the current reporting system to senior management? - weekly, monthly, annually, informal, ad hoc. (copies of blank documents would be useful)

Are these mainly short or long term in nature, financial or non-financial, quantitative or qualitative, concerned with internal efficiencies or the external environment?

Have there been any significant changes in this system over the past ten years?

What do you consider were the main reasons for these changes?

Are there any changes proposed for the future, and if so, what are they and why are they considered necessary?

Appendix B: Conference Paper

Strategic Typologies and Strategic Control:

A Cases Study Analysis

Stephen G. Longden

Aston Business School, Birmingham

Paper presented at Management Accounting Research Conference, Aston University, September 1992.

Strategic Typologies and Strategic Control: A Cases Study Analysis

Stephen G. Longden, Aston Business School, Birmingham.

Using case studies derived from research conducted by Prof. E.W.Davis (Aston), Prof. C.Emmanuel (Glasgow), Dr. J.B.Coates (Aston), R. Stacey (Aston), S.G. Longden (Aston), and sponsored by the Chartered Institute of Management Accountants.

Abstract

Simons (1990) comments that we know surprisingly little about the effects of strategy on management control systems or, alternatively, about how these systems affect strategy. How do top management actually use planning and control systems to assist in the achievement of the organisations goals? How is the strategy translated and communicated to each level of management? The majority of writings on this subject has been normative and not based upon what companies actually do in practice. Previous research has attempted to develop the best way to design and use formal systems to help organisations implement their strategies and objectives (e.g. Anthony 1965). Recent studies have indicated that there are systematic differences in management control systems among companies that compete in different ways (e.g. Miller and Friesen, 1982, Govindarajan and Gupta, 1985, Simons, 1987). But these large sample, cross sectional studies reveal little about the process of management control in these companies. They begin to answer the question "How do they differ?" but not "Why?".

This paper uses case studies derived from research sponsored by the Chartered Institute of Management Accountants, the overall objective of which was to examine the strategic

dimension of corporate performance evaluation by reference to the stated corporate missions, strategies and objectives of 15 multinational companies and to relate these to the control systems used by both the head office and subsidiaries. This paper takes a different perspective from the original study by examining the Strategy and Strategic Control methods of the five German, five U.K. and five U.S. multinational companies featured in the case studies and attempting to find tentative links between them.

The possible links between the generic strategies propounded by Porter (Differentiation, Cost Leadership, Focus) and the strategic control styles proposed by Goold and Campbell (Strategic Planning, Strategic Control, Financial Control), are explored using the process model suggested by Simons . The linkages which might be expected from theoretical analysis are further examined using the fifteen case studies. Tentative links are made between Porter's Differentiation strategy and Goold and Campbell's Strategic Planning style, Porter's Cost Leadership strategy and Goold and Campbell's Financial Control style, and between Porter's Focus strategy and Goold and Campbell's Strategic Control style.

Introduction

This paper uses the current literature on strategy and strategic control to explore possible links between the Strategic typology of Porter (1980,1985) and the Strategic Control styles of Goold and Campbell (1987a,b,c, 1988). In particular the model proposed by Simons (1987,1990) is used to examine the processes involved in determining the best fit between strategy and the means used to control its implementation. These possible links are further examined using fifteen cases derived from previous research and tentative conclusions are drawn.

Appendix gives a description of the Porter Typology.

Methodology

In the original research the methodology adopted was the multi-layered case study. The criteria for selection of the fifteen multi-national companies was that each should be large, with substantial overseas involvement in several countries. The majority of the companies visited appear in the Times Top 100 or equivalent for the respective countries concerned. Five companies were selected from each of the U.K., U.S.A. and Germany. Interviews were conducted with members of the senior head office management and with corresponding representatives from home and overseas subsidiaries. The interviews were semi-structured in order to ensure a degree of consistency whilst at the same time allowing open ended questions and responses.

The present study uses these case studies to examine the possible links between Strategy and Strategic Control indicated by the literature. The case studies are used as a means of exploring possible relationships and hypothesis building, there being no attempt to prove the hypothesised relationship or to use the case studies as a representative sample. Further research will be required to provide validation of the proposed tentative links.

Previous Research

Previous work (Anthony, 1965, 1988) has taken strategy as given and attempted to describe the monitoring and control systems which support this strategy. When, however, strategy is viewed as an incremental and emergent process (Mintzberg 1978; Quinn 1980) questions about this relationship arise. Work by Bourgeois and Brodwin (1984), Mintzberg and McHugh (1985), and Burgelman, 1983a,b) has directed attention on strategy development and the use of the management control systems in this process. Work by Simons (1990), has attempted to show that management control systems are not only important for strategy implementation, but also for strategy formation. His definition of management control systems therefore recognises that these systems are more than devices of constraint and monitoring: management control systems are the formalised procedures and systems that use information to maintain or alter patterns in organisational activity. These systems broadly include formalised procedures for planning, budgeting, environmental scanning, competitor analysis, performance reporting and evaluation, resource allocation and employee rewards (Simons, 1987). The research by Simons (1987) sought to determine the nature and extent of differences in the control systems of firms which followed different business strategies. Using the Miles and Snow (1978) strategic typology of Defenders, Prospectors and Analysers, Simons sought to investigate from an accounting perspective which specific attributes of control system design differ with a firm's strategy. He concluded that firms following different strategies did indeed employ accounting control systems in different ways and offered some preliminary conclusions concerning the attributes which might differ according to strategy. Prospectors seemed to attach a great deal of importance to forecast data in control systems, setting tight budget goals and monitoring outputs carefully. Cost control was reduced, and large firms appeared to emphasise frequent reporting and the use of uniform control systems. In contrast, Defenders appeared to use their control systems less intensively, negative relationships being noted between performance and elements such as tight budget goals and output monitoring. Bonus remuneration based on the achievement of budget targets was emphasised. There was little change in their control systems over time. These results are in accordance with previous research: Kamm (1980) for example, found that control was tightest in companies which were perceived to have the highest level of product/market innovation.

In seeking to understand these differences in behaviour Simons (1990) proposes a process model which uses the concepts of: limited attention of managers; strategic uncertainties; interactive management control; and organisational learning. Managers have neither the time nor the capacity to process all the information available. Thus, only a limited subset of an organisation's formal management control process can have the attention of top management, most areas of control being delegated to subordinates. Because of these attention constraints managers must rank the set of activities they monitor from most critical to least critical. This ranking allows managers to concentrate on the strategic uncertainties which arise due to the specific strategies which they have adopted. Those aspects of the control systems which the senior management use to monitor actively and intervene in the on going decisions of subordinates are termed interactive. Since this intervention provides an opportunity for top management to debate and challenge underlying data, assumptions and action plans, interactive management controls demand regular attention from operating subordinates at all levels of the company. Programmed controls, by contrast, rely heavily on the staff specialists in preparing and interpreting information and receives little attention from top managers. By emphasising certain management controls and making them interactive, top managers ensure that the organisation is responsive to the opportunities and threats that the firm's strategic uncertainties present. The interactive management control processes can be used to manage emergent strategy. Rather than focusing on what the organisation already understands and does well, these systems direct organisational attention to emerging threats and opportunities (Simons, 1990). As participants throughout the organisation respond to the interactive management control process, and are challenged to assess new information and action plans, new strategic initiatives are likely to emerge. Thus, by using a control system interactively, top management can guide organisational learning and thereby unobtrusively influence the process of strategy making throughout the organisation (Simons 1991).

Simons (1990) developed a model to illustrate that the choice of system to be used interactively depends on an assessment of strategic uncertainties by top managers. These strategic uncertainties do not relate to what the firm knows how to do well, but to threats and opportunities due to changing circumstances. Top management focus their attention on strategic uncertainties that could derail their vision for the future and use selected systems interactively to focus the attention of the entire organisation on the uncertainties. Thus a company operating in a rapidly changing environment will tend to focus its attention on external factors in order to reduce its uncertainty. In contrast, a company operating in a relatively stable environment will tend to focus its attention on internal factors.

Analysis of thirty businesses in the health care products industry indicated that company management choose among five different types of control systems:

1 **Program Management Systems**, where the system is used to monitor discrete blocks of organisational activity, usually on a project basis;
2 **Profit Planning Systems**, where the system is used to focus on individual business units, and encompasses profit plans and budgets, forecasts, and long range plans;
3 **Brand Revenue Systems** which focus on the profitability and market share of individual brands;
4 **Intelligence Systems**, which gather information about the social, political, and technical environments of the business, and ;
5 **Human Development Systems**, which include strategic manpower planning, management by objectives, career planning and counselling, and succession planning.

Simons found that top management with a clear sense of strategic vision chose one management control system to use interactively; all other management control systems being used diagnostically. Top managers did not spend a lot of time monitoring the critical success factors associated with current strategies, but focused on systems that produce and monitor information on the strategic uncertainties that are associated with the visions of the future. This choice by top managers as to which control systems to use diagnostically (i.e. in a programmed way) and which to use interactively represents an element of strategic choice (Child 1972). Interactive control systems are used by top management to guide the informal strategy making process by forcing personal involvement, intimacy with issues, and commitment (Mintzberg, 1987). Top management of these businesses were able to articulate a clear sense of how they believed their businesses would compete and evolve in the future. In each case the top manager's choice of which system to use interactively related to the strategic uncertainties that he attached to the business's future, for example, companies in emerging, rapidly growing markets focused their attention on human development systems since the key issue was the management of change and the development of an effective organisation. Little attention was paid to product development or financial results.

Simons found that companies in crisis tended to use all control systems interactively. These were companies in transition, which were undergoing revolutionary rather than evolutionary change. The business strategy was survival and management focus was on all aspects of the business. Once the crisis was over, management's attention began to focus on their chosen long term strategy. At this point their attention was withdrawn from all but one of the control systems, and this one used interactively, all the others being used diagnostically. This would also be the case when a company was seeking to change its strategy, the uncertainty in both the internal and external environment causing management to focus its attention on all aspects of the business. After the change the control system which was previously used in an interactive way will be used diagnostically and a new system used interactively.

Simons found that companies without strategic vision did not use any systems interactively. They were without long term direction and so did not need control systems to focus management's attention

Links between Management Control Systems and Strategic Typologies

Table 1 shows the tentative links made by Simons (1990) between management accounting control systems and the Strategic Typologies of Mintzberg (1973), Miles and Snow (1978) and Porter (1980), using two firms in the same industry. Company A adopts a Porter generic strategy of Cost Leadership, and company B of Differentiation.

Company A, having adopted a Cost Leadership strategy, focuses its attention on that subset of strategic uncertainties which relate to this strategy, i.e. new product technologies or attributes which could shift existing low cost advantage. Programs focus on cost improvement with equal or better quality, and enhancements to existing products to help customers become more efficient. Little management attention is given to long range planning, profit planning and budgeting, incentive reward systems. These are all programmed.

Company B, on the other hand, having adopted a strategy of Differentiation through product innovation, focuses its attention on strategic planning and budgeting. This is used to focus lower management's attention on current and future product/market strategies. Budget discussions during the year concentrate upon unanticipated changes in the competitive environment, marketing tactics to pre-empt competitor actions, and the type and timing of new product development. The incentive payment systems is also used interactively being based upon the subjective judgement of individual performance rather than financial measures.

The Simons model shows how the choice of control system affects strategy and strategy formation so that management's view of the world is affected by their choice of such systems. Given that choice, it is difficult for management to change strategies since the very choice of which control system to make interactive limits the information which is being presented to them upon which the decision to change strategy would be based. Only in times of crisis, when more systems become interactive, will dramatic changes of strategy be made.

Table 1: Comparison of competitive characteristic and top-level management control systems used at two companies

	Company A	Company B
Competitive characteristics		
Miles & Snow (1978)	Defender	Prospector
Mintzberg (1973)	Adaptive	Entrepreneurial
Porter (1980)	Overall Cost Leader	Differentiation
Management control systems at top management levels		
Strategic planning review	Sporadic. Not used actively in managing the business	Intensive annual process
Financial goals	Set by top management. Top-down.	Established by business units. Bottom-up.
Budget preparation and review	Prepared to meet financial goals	Focus on strategy and tactics
Budget revision and updates	Not revised during budget year	On going revision
Program reviews	Intensive monitoring	Limited monitoring
Evaluation and rewards	2/3 on profits 1/3 on personal goals	Subjective evaluation

Strategic Management Styles

This work by Simons provides pointers to possible links between Strategic Typologies and the methods used by companies to implement their strategic i.e. Strategic Control. In particular, Simons gives characteristics of the control styles used by companies adopting a Differentiation strategy and a Cost Leadership strategy (Porter, 1980). A typology which focuses on Strategic Control is given by Goold and Campbell (1987c), who propose the three Strategic Management Styles of Strategic Planning, Strategic Control, and Financial Control. In this section the main characteristic of this typology will be described and tentative links between it and the Porter typology made. Subsequent to this, these tentative links will be explored using the case studies.

Goold and Campbell classify the main mechanisms through which the centre influences business unit strategy and actions as:

- Organisational structure
- Planning process
- Central themes, thrusts and suggestions
- Management of overlaps
- Resource allocations
- Objective setting
- Monitoring progress
- Central use of incentives and sanctions

Each strategic management style uses these mechanisms in different ways and to different degrees. Each of the mechanisms has an underlying tension, so that each style, while resolving certain tensions will exacerbate others.

The main tensions are:

Organisational structure and overlap management	Multiple perspectives and coordination versus clear responsibilities
Planning process	Detailed planning reviews versus entrepreneurial decision making
Themes, thrusts and suggestion	Strong leadership versus business autonomy
Resource allocation	Long term strategic versus short term financial objectives
Objectives	Long term strategic versus short term financial
Monitoring and controls	Flexible strategies versus tight controls

Each style is more or less appropriate in different business circumstances. A stable and mature business may respond well to a centre which stresses control of financial results, whereas a company which has long lead times, large investments and technological complexity requires a central style with more stress on prior planning and strategy (Goold and Campbell, 1987b). It follows that different businesses in a diverse portfolio may respond best to different styles, and hence the centre may need to adjust or fine tune its relationship with each subsidiary or group of subsidiaries. Also, as the business environment changes due to new competition, new markets, and new technologies, the centre's style may need to change. Goold and Campbell found that companies tended to employ a uniform style across most of their businesses, and that changes in style occurred seldom. When they did come they normally involved the trauma of extensive senior management turnover. They found few examples of the central team adopting a radically different style with different part of the portfolio (Goold and Campbell, 1987b). This reflects the importance of simplicity and consistency in an organisation's structure and systems. A flexible or changing style makes communication difficult and leads to confusing signals being received by subsidiary management.

The adoption of a particular style in some ways also reflects the head office's, and in particular the COE's image of a successful corporation and its chosen strategic orientation. Financial Control assumes that the organisation is composed of strong individuals, highly motivated by personal goals, and that the corporation provides the context and incentives for them to drive themselves to even greater achievements. It also assumes a business environment where straightforward pursuit of profit can safely be made the dominant goal. It will tend therefore to adopt a cost leadership strategy. Strategic Planning assumes that managers succeed by working cooperatively together to devise new, bold and creative strategies to build long term advantage in a complex and uncertain world, and that corporate management should be contributing to, and catalysing, this creative and cooperative process. This will tend to lead the company towards a differentiation strategy, probably concentrating on a few core businesses. Strategic Control shares Financial Control's view of managers as goal orientated individualists, but prefers Strategic Planning's account of business as concerned with long term competitive advantage in an uncertain and complex environment. Such a company will tend to adopt a differentiation strategy in a number of diverse businesses, but could be in danger of being "Stuck in the Middle".

Before analysing our cases using this typology, the key features of each style will be described in more detail and tentative links made with the generic strategies of Porter and the work of Simons.

Strategic Planning Style

The Strategic Planning company adopts a fluid structure which encourages a variety of views to be expressed, sets up a planning process which allows strong leadership by the centre and encourages co-operation between units, and avoids inflexible objectives which will constrain managers from seeking creative long term strategies.

Organisational Structure and Management of Overlaps

The organisation tends to be complex, often using the matrix form of structure. This allows a variety of views on strategy to be expressed by each part of the organisation, and a wider discussion of issues and new strategy options. Coordinating committees and devices allow strategies to be drawn together across a variety of businesses or countries to achieve the benefits of synergy and integration, and strong staff groups at the centre allow economies of scale in the provision of central services. The price paid is a loss of some autonomy by the individual businesses.

Planning Process

These are extensive and strategic in orientation, providing an important means of getting different views aired and enabling central management to challenge existing patterns and norms. Central management are much more informed about strategic issues and exercise leadership in strategic decision making. The need to communicate and justify plans to the centre inhibits freedom of action, slows down the decision process, and takes some ownership from lower levels of management. The strategic planning process can be cumbersome and confusing rather than probing and providing insight.

Themes, Thrusts and Suggestions

Strong central leadership through themes, thrusts and suggestions allows bolder, more aggressive strategies to emerge from all levels of the company. Such strategies are supported by the centre by making resources available to support investment, thus allowing businesses to build long term advantages in major international markets. Mission statements and policies can be valuable by defining what will receive priority from the centre. However, close involvement by the centre in strategy development inevitably reduces both the objectivity of the centre in reviewing strategy, and the sense of personal ownership at the business level.

Resource Allocation

The centre acts as a buffer to the capital market, protecting business units from the need to satisfy the shorter term performance criteria applied by the outside investor. This allows business managers to concentrate on building core businesses, make major acquisitions to support existing activities, or build new ones without the pressure of short term performance. Clear priority can be given to long term objectives.

Objective Setting

With this style there is the difficulty of defining clear, objective and measurable goals for monitoring long term performance. The company must also accept the loss of clarity and enforceability of short term objectives in order to allow the allocation of resources to long term aims.

Monitoring and Controls

The control system has to be flexible, allowing short term variations in order to achieve the longer term objectives. It is more tolerant of innovative strategies that carry with them the risk of failure, and of strategies that evolve continuously to meet the needs of rapidly changing markets. The price of flexibility is ambiguous performance measures and a reduced sense of personal accountability. Strategic control variables may be used to provide short term measures of progress towards long-term strategic goals. Such strategic milestones are intended to focus directly on measures of competitive advantage e.g. product development, customer service, market share, and to provide a balance to financial targets

Generic Strategy

The strategic planning style is most effective in organisations that are searching for a broad, integrated strategy for developing the business, where focus in on long term competitive advantage. Strategic planning companies tend to focus on a few core businesses, divesting those that do not fit into their main areas (Goold and Campbell, 1987a). A company using its management control systems in this way would tend to be one which has adopted a generic strategy of Differentiation (Simons 1990).

Financial Control Style

The Financial Control company establishes an organisational structure with separate responsibilities, allows freedom to lower level managers to devise and implement strategies unfettered by corporate planning bureaucracies, and builds tight controls at the centre to monitor performance and provide real motivation to perform.

Organisation Structure and Overlap Management

Financial control companies stress multiple, separate profit centres, each with independent responsibility. As far as possible, these structures replicate, for the profit centre, the circumstances of independent companies. The profit centres are set up to overlap as little as possible, and no attempt is made by the centre to co-ordinate between them. The profit centre manager therefore enjoys a high degree of autonomy.

Planning Process

The Financial Control company concentrates on budgets. The emphasis is on the short term, and on agreeing targets rather than the means by which they are going to be achieved. The centre probes the plans, but this time for standards of profitability and growth rather than for the underlying strategic logic i.e. ends not means. The focus on results not strategies leaves managers more free to make their own decisions, providing they meet the required performance. The planning process can be simpler and therefore less prone to bureaucracy. The major drawback is the lack of strategic orientation and the emphasis on the short term financial performance. Market share, for example, is not a major concern.

Themes, Thrusts and Suggestions

The Financial Control company avoids any broad, top down corporate themes, missions or thrusts. Constructive suggestions are sometimes made but not imposed.

Resource Allocation

The Financial Control style applies capital market criteria to each of its businesses. With detailed information the centre can ensure that funds flow only to those businesses whose proposals meet corporate criteria, and whose track records give confidence in their ability to deliver. The system reviews each investment on its merits rather than as part of a long term business strategy. It insists that projects give high returns and fast payback. Financial criteria predominate as the centre does not pretend to have a detailed knowledge of each business's products and markets. The centre is more directly active in acquisitions and divestments.

Objectives

The emphasis is on short term profit objectives in resource allocation and acquisitions. Projects of a more strategic nature are not taken on because of their longer term payback.

Monitoring and Controls

Controls are tight, the monitoring of results and feedback to the centre creating a strong incentive to deliver. Targets are usually monthly. The criteria for judging performance is simple, thus making it easier for managers to focus their attention and to know whether they are successful or not. This tight control tends to stifle creativity and flexibility to respond to opportunities.

Generic Strategy

Headquarters does not formally review strategic plans. Instead, it exerts influence through short-term budgetary control. The focus is on short term profits and cost control. The tendency is to focus on segments or niches and to avoid integrated strategies across broad business areas (Goold and Campbell, 1987a). A company using its management control systems in this way would tend to be one which has adopted a generic strategy of cost leadership (Simons 1990).

Strategic Control Style

Organisational Structure and Overlap Management

Strategic Control companies are organised into divisions in order to achieve the motivational effects of decentralisation whilst at the same time allowing important business overlaps to be managed at the divisional level. In effect, we have the financial control company attributes between the centre and the divisions and the strategic planning attributes between the division and the cost centres.

Planning Process

In the Strategic control company the plans come from the divisions and are reviewed by the centre. The centre limit themselves to a questioning role, and do not propose their own views. They in effect provide a quality control function in the strategic review process, attempting to raise standards of thinking and analysis.

Themes, Thrusts and Suggestions

Strategic Control companies generally avoid major suggestions and initiatives, and are not active in co-ordinating between divisions. The emphasis is on business autonomy, and the responsibility and independence of the business manager.

Resource Allocation

The centre provides access to a pool of resources which can be made available for investment in long term, large or risky projects. The centre's main task is therefore to balance short term and long term goals by means of resource allocation.

Objectives

There are numerous difficulties in achieving the right balance between short term and long term objectives. The centre has difficulty in assessing the more speculative, long term investments due to a lack of detailed knowledge. Financial controls can crowd out long term strategies or vague strategic goals can become an excuse for non-performance.

Monitoring and Controls

There is an intrinsic conflict between encouraging long term, creative, strategic thinking, and imposing tight, short term controls. Making the controls supportive of flexible and innovative strategies is not easy. Financial controls from the centre to the divisions tend to be tight. Strategic control variables may be used to provide short term measures of progress towards long term goals.

Generic Strategy

This style has the advantage over the other two of being able to cope with diversity. It can allow the company to be managed as a portfolio with a variety of strategies. As noted by Porter (1980), such a variety of strategies can result in a company being "stuck in the middle". The tendency will be towards the adoption of a differentiation strategy but with some divisions/subsidiaries being allowed to adopt a cost leadership strategy. A focus strategy may well be the solution to this dilemma, each subsidiary focusing on a particular niche market and adopting whichever of the variants of this strategy i.e. Focused Differentiation or Focused Cost Leadership it deems most appropriate.

Thus, an examination of the characteristics of the Goold and Campbell strategic control typology has enabled tentative links to be made between the Porter strategy of Differentiation and the Goold and Campbell strategic control style of Strategic Planning , between the Porter strategy of Cost Leadership and the Goold and Campbell strategic control style of Financial Control, and between the Porter strategy of Focus and the Goold and Campbell strategic control style of Strategic Control, although the latter is somewhat less well defined there being a tendency towards a Porter "Stuck in the Middle".

Analysis of the Cases

In order to further explore the links between Strategy and Strategic Control the case studies have been analysed, first using the Porter Typology, and subsequently using the Goold and Campbell model. These two sets of analysis are then compared to explore possible links between them. In particular, discrepancies between the hypothesised links and those found from the cases are explored.

Porter Typology

In this section the case studies are analysed against the Porter model to see how good a fit there is between the "pure" strategic types and those actually encountered . Due to the limitations of the data available only certain aspects have analysed. These are:

1 Skills and Resources Focus
2 Organisational Structure
3 Focus of Control
4 Performance Measures
5 Incentives

According to the Porter model we would expect the characteristics as set out in Table A (Appendix A), taking the two main strategies of Cost Leadership and Differentiation, the Focus strategy being a combination of one or other of these strategies in a niche market.

To the extent that companies fall between these two extremes of the spectrum they could be said to be "Stuck in the Middle".

Tables 2 - 4 give a detailed analysis of the cases against Porter's Strategic typology. A number of interesting points can be made from the analysis. The majority of the firms adopted a clear strategy, either Differentiation (UK1, US2, US4, US5, GR1, GR3, GR4, GR5) or Cost Leadership (UK3), but there were others which had a mixed strategy which has the danger of being Stuck in the Middle. Each generic strategy has a fundamentally different approach to creating and sustaining competitive advantage. The focus of management attention and the organisation of resources is different in each case. A mixed strategy leads to a loss of top management focus and a subsequent loss of control. This can be alleviated by the company creating a number of separate divisions which operate independently, each adopting a different generic strategy (Porter, 1985). Unless a firm strictly separates the units pursuing different generic strategies, it may compromise the ability of any of them to achieve its competitive advantage. German Company 2 for example has a main generic strategy of Differentiation, but uses Cost Leadership in specific business sectors where this is considered more appropriate. The company structure recognises these different strategies.

In the past there was much emphasis on managing corporations as portfolios of different product and markets with different risk/return characteristics. This approach was popularised by U.S. consulting firms in the 1970's and reviewed in Hamermesh (1986). The problem with this approach is that senior management do not have the time or the capacity to process all the information which is necessary to control the organisation.

Table 2: Competitive Strategies: U.K. Companies

	U.K. 1	UK. 2	U.K. 3	U.K. 4	U.K. 5
Skills and Resources Focus	Core markets, specialist manufacture of products	Niche markets	Lowest cost producer, niche markets, high market share	Focus on core markets. Competitive in terms of quality, performance, value for money etc.	Leading supplier of goods and service based upon quality and customer service
Organisational Structure	Two business streams by product	Five management groups by market	Five divisions by product	Strategic sectors, market driven	Three divisions based upon product-market
Focus of Control	Market share and sales volume	Financial data	Performance against budget	Performance against budget. Flexibility to take market opportunities.	Minimum financial criteria. Competitive performance on productively, quality, new products etc.
Performance Measures	Subjective based upon market position and strategy	Financial and non-financial	Financial	Minimum financial criteria. Competitive performance on productively, quality, new products etc.	Profitability, cash flow, market share.
Incentives	Performance against budget	Financial targets	Financial performance	Financial, personal and stategic	Financial and individual targets
Generic Strategy	Differentiation	Focus but with a danger of being Stuck in the Middle	Cost Leadership	Differentiation. Has moved away from Stuck in the Middle	Differentiation but with some cost centres Stuck in the Middle

Table 3: Competitive Strategies: U.S. Companies

	U.S. 1	U.S. 2	U.S. 3	U.S. 4	U.S. 5
Skills and Resources Focus	Main and traditional markets: quality, performance, market share	Product quality, customer service, R&D	Productivity, cost reduction, technology, quality, safety, environment	Research and development, high value added niche markets	Innovative technologies and customer service
Organisational Structure	Four operating groups based upon market-product	Geographic	Two segments based upon technology and production methods	Matrix: production v marketing	Production by product, marketing geographically
Focus of Control	Performance against budget	Performance against plan	Planned volume and cost. Safety	Varies: position of product in life cycle	Marketing and product development
Performance Measures	Financial, market share, new product development	Personnel, customer service, quality, growth, financial.	Performance against budget. Safety and environment	Quality of performance: financial one aspect	Quantitative and qualitative: financial, quality, productivity
Incentives	Financial: Economic value added	Performance against budget and subjective	Based upon profit	Long term objectives of individuals	Quantitative and qualitative
Generic Strategy	Differentiation but with movement towards cost leadership	Differentiation	Cost Leadership, but with some Differentiation due to technology of products and process	Differentiation	Differentiation

Table 4: Competitive Strategies: German Companies

	German 1	German 2	German 3	German 4	German 5
Skills and Resources Focus	Maintain and improve market share. Concentrate on high value sector of market. Reduce costs.	Varies by divisions: cost effectiveness; product quality and image	High market share. Growth through acquisition and internal	Become more international, customer service	Dominance of industry sector. High technology, new product development, R&D
Organisational Structure	Four business areas based upon market. Strong central control of R&D	Four industry orientated divisions. Move towards market orientation	Matrix: operating companies v geographic operations. Four main business interest areas	Four main business areas	Matrix: industry sector v geographic region.
Focus of Control	Strong central staff functions in key business areas	Performance against budget: profitability, market share, production	All aspects of the business. Informal control	Business problems rather than financial	Long term strategic. Tight control of capital investment for expansion and new products
Performance Measures	Financial and productivity	Market share, profitability	Financial, market share, product competitiveness, productivity	Minimum financial criteria. Customer service and productivity	Minimum financial criteria. Control of working capital. Sales volume
Incentives	Profitability	Company and individual performance	Individual performance	Individual performance	Rarely used
Generic Strategy	Differentiation, but with strong cost control	Differentiation in most businesses, but some Cost Leadership	Differentiation, but also seeks to dominate the market.	Differentiation	Differentiation

They must therefore adopt a strategic focus in order to remain in control (Simons, 1990). Those which chose to focus on cost and efficiency will tend to adopt a Cost Leadership strategy, which will thus enable them to manage a diversified portfolio of companies. Those, on the other hand which chose to concentrate on particular markets and products will adopt a Differentiation strategy and will attempt to divest themselves of areas of the business which do not fit into this strategic focus. A company which is not successful in this will remain Stuck in the Middle with management attention ill focused. U.K. Company 1 for example has recently divested itself a segment of its business in order to concentrate on its core markets.

U.K. Company 4 has used its competitiveness achievement plan as a main driving force to move the company away from its previous Stuck in the Middle position to that of Differentiation. German Company 5 has sought to divest itself of low technology products in order to concentrate on the more profitable high technology products.

Where a company adopts Cost Leadership as its main generic strategy, it may be able to also differentiate some of its products on other than price due to superior technology, product innovation or quality. This is the case in U.S. Company 3 where the main focus is on cost leadership but where certain technological breakthroughs have given the company an advantage in terms of product quality and technological innovation.

Where a company's market is changing it may have to adopt a different generic strategy. Zajac and Shortell (1989) suggest that a firm may be likely to change from one generic strategy to another simply because it perceives the original generic strategy to be less viable in the new environment. The likelihood of a firm changing its strategy may potentially be a function of an organisation's prior generic strategy i.e. some generic strategies may be "stickier" than others. U.S. Company 1 has previously adopted a differentiation strategy, but with increasing competition (particularly from Japan) there is a move towards a cost leadership strategy with consequent changes in the organisational structure and control systems.

Some of the companies were able to adopt a differentiation strategy and to a varying degree a cost leadership strategy. This was usually achieved by seeking to dominate the market by means of product differentiation and by acquisition of competitors, thus enabling them to gain economies of scale. German Company 3's generic strategy, for example, is Differentiation, mainly through product quality, but it also seeks to dominate the market and thus achieve economies of scale , lower costs and consequently higher profits. This is particularly true of the German companies which have a secure home market in which they are dominant. Their desire to internationalise may lead them to modify their generic strategies. This is certainly true of German Company 4 which adopts a generic strategy of Differentiation in its home market but may have to modify it in order to compete in the world market.

Goold and Campbell Typology

Tables 5 - 7 give a detailed analysis of the cases against the Goold and Campbell Strategic Control styles typology.

Table 5: Strategic Control: U.K. Companies

	U.K. 1	U.K. 2	U.K. 3	U.K. 4	U.K. 5
Organisational structure and overlap management	2 business streams	5 management groups, 20 direct reporting businesses	Overriding philosophy of decentralisation	3 sectors, decentralised into divisions	3 divisions
Planning process	Extensive, strategic, from centre	strategic, from DRB's	Mainly annual budgets, bottom up	Strategic, from sectors	Strategic at divisional level
Themes, thrusts and suggestions	Strategy statement	Business autonomy stressed	Business autonomy stressed	Strategy statement, some business autonomy	Divisional autonomy stressed
Resource allocation	Long term economic performance	Long term, strategic	Project based, short term payback	Long term, strategic	Strategic and medium term financial
Objectives	Long term strategic and short term financial	Long term strategic and short term financial	Short term financial	Long term strategic and short term financial	Long term strategic and short term financial
Monitoring and control	Flexible, budget comparisons	Flexible, budget comparisons	Very tight	Flexible, budget comparisons	Flexible
Style	Strategic planning	Strategic control	Financial control	Strategic control	Strategic control

Table 6 Strategic Control: U.S. Companies

	U.S. 1	U.S. 2	U.S. 3	U.S. 4	U.S. 5
Organisational structure and overlap management	4 operating groups Divisional structure, separate investment centres	Geographical, 150 subsidiaries, strong staff functions, coordination mechanisms	2 operational segments, geographical organisation within	Matrix structure,: production and marketing, strong staff functions, coordination mechanisms	Manufacturing and marketing, product groups and geographical
Planning process	Budgets, bottom up	Extensive, strategic	Strategic, plus annual plans	Extensive, strategic	Strategic, bottom up and top down
Themes, thrusts and suggestions	Divisional autonomy stressed	Corporate mission statement	Strong central leadership	Strong central leadership	Moving towards more autonomy
Resource allocation	Project based, short payback	Part of long term strategy	Part of long term strategy	Part of long term strategy	Part of long term strategy
Objectives	Sort term, financial	Long term, strategic and medium term financial	Long term strategic and medium term financial	Medium term strategic	Long term strategic and short term financial
Monitoring and control	Tight, against budget	Flexible, against strategic plan	Emphasis on costs and output. Daily contact	Flexible, informal	Tight strategic and financial
Style	Financial control	Strategic planning	Strategic control	Strategic planning	Strategic control

Table 7: Strategic Control: German Companies

	German 1	German 2	German 3	German 4	German 5
Organisational structure and overlap management	4 business areas, matrix structure, strong staff functions	4 industry sectors, matrix structure	9 groups of companies "controlled decentralisation"	Highly decentralised,	Matrix structure
Planning process	Extensive, strategic	Extensive, strategic	Extensive, strategic	Strategic, consensus building	Extensive, strategic
Themes, thrusts and suggestions	Strong central leadership	Strong central leadership	At strategic level only, operational business autonomy stressed	General understanding of group aims, business autonomy stressed	Operational autonomy stressed
Resource allocation	Part of long term strategy	Part of long term strategy	Part of long term strategy	Part of long term strategy	Part of long term strategy
Objectives	Long term strategic	Long term strategic	Long term strategic and shorter term financial	Long term strategic and shorter term financial	Long term strategic and shorter term financial
Monitoring and control	Flexible, regular	Flexible	Flexible, informal	Tight, informal	Tight
Style	Strategic planning	Strategic planning	Strategic planning	Strategic control	Strategic control

A number of interesting points arise from the analysis, particularly when considering each strategic control style and its underlying tensions. As was noted earlier, each of the strategic control styles uses the mechanisms of organisational control, planning process, resource allocations etc. to influence business unit strategy, and each of these mechanisms has an underlying tension. Each style therefore, whilst resolving certain tensions e.g. multiple perspectives and co-ordination, will exacerbate others e.g. the desire for autonomy. These tensions were particularly apparent when the company was moving, or had moved towards one style, and away from another e.g. a strategic control company moving towards strategic planning. If this involved the centre giving up certain information or control mechanisms they were reluctant to do so. U.K. Company 1 for example was moving from a Strategic Control style, with an emphasis on short term financial performance to a more Strategic Planning style. The objectives however still included short term financial measures and one subsidiary commented that the emphasis by senior management was still on financial performance. The difficulty lies in setting alternative short term performance measures such as strategic milestones. Goold and Campbell comment that the difficulty in establishing strategic milestones relates partly to the problems encountered in identifying the key factors that contribute to competitive advantage in a business; partly to problems of finding objectives and measurably variable to indicate progress; and partly to the inability to be precise about how to trade-off progress against different strategic variables and between strategic and financial variables.

U.S. Company 1, on the other hand, had changed from a Strategic Control style to a Financial Control style with the introduction of the focus factory concept. This was due to pressure for more autonomy from the divisions and the appointment of a financially orientated chief executive. Within U.S. Company 2 there was also this pressure for more autonomy and as a result a movement from a Strategic Planning style towards a more Strategic Control style. This emphasis on part of the strategic control system during a transition period fits with the Simons paradigm of the interactive/programmed use of strategic control systems (Simons 1987). The expectation from the model is that part of the system would be used interactively during this transition period and this is what we find.

The issue of autonomy and control is an important one. Most of the companies gave their divisions/ subsidiaries some autonomy. The question which needs to be decided by the head office is how much to let go. Should the strategy/ objectives be agreed and the subsidiary trusted to manage effectively, only contacting head office when there are any problems, or should the head office watch over them like an over protective parent requiring regular reports and frequent meetings? The predominant attitude amongst multi-nationals appears to be the latter. In the analysis of strategic control styles only Strategic Planning allows a flexible approach to monitoring and control. In the case of the Strategic Control Style we have tight control, and in the case of the Financial Control Style, very tight control. The cases did show a certain variation from this however, the Strategic Control companies in particular having a fairly flexible approach providing the subsidiaries were close to budget. There was much emphasis on informal contact rather than formal meetings particularly amongst the German companies visited. Informal contact does not however imply autonomy and can be more restricting than regular monthly reporting. Goold and Campbell comment that if management seizes the opportunity for discussing strategic issues afforded by the budget and capital appropriation systems, and maintains regular informal contact between the centre and the business, there may be little that formal strategic planning reviews can add (Goold and Campbell 1988).

Another way of preserving a balance between strategic and financial goals was to treat financial objectives as minimum standards which have to be met, while maintaining strategic goals as the real objective to strive for in the long term (UK 4, GR 4, GR 5). This, to some extent, clarifies the role of the various performance measures, but there are still potential problems concerning the level at which to set the minimum financial objectives, and the right response when achievement even of the minimum standards appears to threaten strategic progress.

Strategic Planning companies regard strategic progress as the main objective, whereas Control oriented companies believe that it is up to business mangers to find ways of accommodating to the changes in the environment without deviating from their objectives. Tensions thus exist between two prime considerations: establishing broad strategic advantage and adherence to the specific control objectives (Goold and Campbell 1988).

Links between Strategic Control Style and Generic Strategy

Table 8 gives an analysis of strategic control styles and generic strategies. As can be seen there is overall agreement with the expected results as discussed previously.

Companies with a strategic control style of Strategic Planning are those that are searching for a broad, integrated strategy for developing the business, where the focus is on developing long term competitive advantage. These companies have adopted a generic strategy of Differentiation. The one exception to this is German Company 3 which allows some business sectors to pursue a strategy of Cost Leadership. The company is able to manage this lack of focus by reorganising into four business sectors, each with its own functional organisation. The company was classified as Strategic Planning rather than Strategic Control due to its strong emphasis on strategic planning and its concentration on the long term financial performance of the company.

Table 8 - Analysis of Strategic Control Styles and Generic Strategies

Generic Strategy:	Strategic Control Style		
	Strategic Planning	Strategic Control	Financial Control
Differentiation	UK1 US2 US4 GR1 GR2(3) GR3	UK4(4) UK5(4) US5 GR4 GR5	US1(1)
Cost Leadership		US3(2)	UK3
Focus		UK2(4)	

NOTES:

1 moving towards Cost Leadership.

2 some Differentiation due to the technology of the products and processes.

3 some Cost leadership.

4 danger of being Stuck in the Middle.

The companies with a strategic control style of Financial Control have adopted or are moving towards a generic strategy of Cost Leadership. The focus is on short term profits and cost control, with a tendency to avoid integrated strategies across broad business areas. It could be argued that the decision to move towards a strategy of Cost Leadership (US Company 1) has precipitated the change in organisational structure and control systems. Such a change is consistent with the Simons interactive/programmed typology which suggests that a system will become interactive when the company's strategy is changing and management wish to re-focus subordinate management's attention. By focusing attention throughout the organisation, top management use interactive management control to influence and guide the learning process (Simons 1990).

The most variation in generic strategies is found, as expected, in those companies which have adopted a Strategic Control style. This style is able to cope with diversity, allowing the company's management to adopts a variety of strategies e.g. US Company 3 has a main strategy of Cost Leadership but is able to use Differentiation in certain markets. The danger of being Stuck in the Middle is highlighted by the analysis. UK Company 4 was moving away from being Stuck in the Middle towards Differentiation. This was being driven by making the performance evaluation system and incentive payment system interactive. Making a reward system interactive demands a great deal of attention from managers throughout the organisation. Rewarding effort rather than results required evaluators to understand competitive business environments, potential opportunities and constraints, and the range of action alternatives available to subordinate managers. This information gathering process generates learning about strategic uncertainties and about possible new tactics and strategies (Simons 1990). UK Company 5 has adopted a Differentiation strategy, but has some profit centres Stuck in the Middle as minor players in niche markets. In order to gain competitive advantage these minor players need to move towards a Focus strategy (Porter 1980). This is the strategy adopted by UK

Company 2 which adopts a Focus strategy within each of its Direct Reporting Businesses. This company has recently reorganised into five management groups in order to manage the diversity more effectively. The tendency is to make the financial control system interactive and to move more towards a Financial Control style of management.

Conclusions

This paper has attempted to link the generic strategies propounded by Porter (1980) with the strategic control styles proposed by Goold and Campbell (1987a), using the process model suggested by Simons (1990). The linkages which might be expected from the theoretical analysis has been explored using the 15 case studies. Any conclusions drawn must of course be tentative due to the dynamic nature of business, but certain patterns have been noted.

The research suggests that those companies which seek to adopt a generic strategy of Differentiation should adopt a Strategic Planning Style in order to make the strategic planning process interactive and thus focus management's attention on the strategic uncertainties of the product and market. On the other hand, companies which seek to adopt a Cost Leadership style should adopt a Financial Control Style in order to make the financial and budgetary controls interactive and thus focus management's attention on cost control and efficiency. The strategic uncertainty in this case is competition from other low cost producers and innovation in processes.

A company which seeks to adopt a strategic planning style of Focus should adopt a Strategic Control style as this allows the flexibility to manage the diversity. This is also true of those companies which seek to adopt a Differentiation style in a number of different markets, or a mixed style depending upon product and market. This however can lead to a lack of company focus and being Stuck in the Middle. This is because subsidiary management receive a confused set of signals from senior management as a variety of systems have to be made interactive depending upon the strategy adopted. This confusion can be reduced by organising the company into business sectors, and allowing the sectors to adopt either a Strategic Planning style or a Financial Control style depending upon their strategy. The senior management then have to manage the diversity of signals from the business sectors, usually by concentrating on financial controls.

Appendix A

Porter's Strategic Typology

Porter suggests (Porter, 1980) that developing a competitive strategy is a way of setting down a broad formula for how a business is going to compete, what its goals should be, and what policies will be needed to carry out these goals. Competitive strategy is a combination of the ends (goals) for which the firm is striving and the means (policies) by which it is seeking to get there. These goals are often termed mission or objectives, whereas the policies are sometimes called tactics. Goals define how the business is going to compete. They are usually formulated in terms of objectives for profitability, growth, market share, social responsibility etc.

In formulating a competitive strategy a company has to relate to the environment in which it operates. This environment encompasses social as well as economic forces, but focuses on the particular industry in which the company operates. The state of competition in an industry depends upon five basic competitive forces (Porter, 1980): barriers to entry, threat of substitution, bargaining power of buyers, burgaining power of suppliers, and rivalry among current competitors. All five competitive forces jointly determine the intensity of industry competition and profitability, the strongest forces being crucial in strategy formulation. Different forces take prominence in shaping competition in each industry.

In coping with the five competitive forces, Porter (1980) proposes three potentially successful generic strategies which will enable a company to out perform its competitors.

1 overall cost leadership

2 differentiation

3 focus

Cost leadership requires the aggressive construction of efficient-scale facilities, vigorous pursuit of cost reductions, tight cost and overhead control, avoidance of marginal customer accounts, and cost minimisation in areas such as Research and Development, service, sales force, advertising. Low cost relative to competitors becomes the main strategic emphasis although quality, service and other areas cannot be ignored. The strategy enables the company to achieve above average returns in its industry despite strong competition.

Differentiation is the creation of a product or service which is perceived industry wide as being unique. Approaches to differentiation can take many forms: design or brand image, technology, customer service, etc. and should be along several dimensions. The differentiation strategy does not allow the firm to ignore costs, but rather they are not the primary target. The strategy enables the company to earn above average returns in its industry because it creates a defensible position, insulating against competitive rivalry by the use of brand loyalty by customers. This avoids the need for a low cost position by increasing margins.

Focusing is a combination of the previous two generic strategies but narrowed down to a particular buyer group, market segment, or geographic market. By focusing the firm is able to serve its narrow strategic target more effectively or efficiently than its competitors who are more broadly based. The firm achieves either differentiation from better meeting the needs of the specific target, or lower costs in serving this market, or both. The focus strategy leads to a limitation of the market share achievable, the trade off being between profitability and sales volume.

The three generic strategies imply differing organisational arrangements, control procedures, and incentive systems. The generic strategies also require different styles of leadership and can translate into different corporate cultures and atmospheres. These features are set out in Table A.

The three generic strategies are alternative, viable approaches to dealing with the competitive forces. A company which fails to develop its strategy in one of the three directions, a company "Stuck in the Middle", is in an extremely poor strategic position. It lacks the market share, capital investment and cost control to be a cost leader, and the marketing ability, quality and technology to sufficiently differentiate its products from those of its competitors. It loses high volume, low margin business to lower cost producers, and lower volume, high margin business to companies who have sought to differentiate their products. This lack of focus is often reflected in a blurred corporate culture and a conflicting set of organisational arrangements and motivation system. A company seeking to move from this "Stuck in the Middle" position to one of the generic strategies may encounter a great deal of corporate inertia. To achieve a position of cost leadership or at least cost parity it must make aggressive capital investments and seek to buy market share. To achieve a position of differentiation it must rationalise its businesses to certain core areas which may mean the loss of market share and a drop in absolute sales. Such changes in strategy must also be reflected in corresponding changes in the corporate culture, organisation structure, controls and reward systems.

TABLE A - Analysis of characteristics

Generic Strategy	Cost Leadership	Differentiation
Skills and Resources Focus	Substantial capital investment, focused upon cost savings and productivity. Emphasis on production process and economies of scale. Minimum R&D.	Emphasis on marketing, customer service, new product development, technological leadership.
Organisational Structure	Structured organisation and responsibilities	Matrix organisation but with strong central control of R&D, product development and marketing.
Focus of Control	Tight cost control. Focus on financial performance.	Focus on markets, market share, quality.
Performance Measures	Financial performance, manufacturing productivity	Market share, growth, minimum financial criteria
Incentives	Based upon meeting strict quantitative targets	Based upon both quantitative and qualitative targets

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