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A Systems Approach to Strategic Processes

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In pursuit of strategic ability, one is in a constant attempt to improve. The result is the hope of a better way of doing. It is an audacious goal, however it is nevertheless necessary.

The idea of this dissertation and its audacious goals has taken shape because of many conversations with my supervisor Professor Rob Taylor. He has provided immense mentoring through difficult subject matter and process. In writing this dissertation it has at many stages proved to be a testing process. The guidance and patience of my supervisor Professor Rob Taylor has provided the strong support base and could not have been completed without his help.

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Abstract

In the 1970's Kotter wrote an article, Why "Wasting" Time Is More Important Than Ever, in which he described the average manager's day. However, what he described, and what many management texts described was contrastingly different. Texts described highly structured processes whilst Kotter observed the opposite. The interesting insight after revisiting the article, he suggests in a more recent article, What Effective General Managers Really Do, is that he did not think of the word leadership to describe the process he observed. The article, and the more importantly, the language used to describe the process was a function of the era in which the article was written.

Surprisingly this was also the period in which strategic planning in organisations was widely used. The language and the times that are characteristic to us today are complexity, discontinuities, uncertainty, rapid change and unpredictability. The 1970's was the era of strategic planning models, the 1980's strategic planning models failed to deliver and so we saw the rise of strategic management, and, in the 21st century even strategic planning models fail to deal with the current realities so we have strategic leadership.

Today we have the language of leadership to describe what most academics and consultants describe as a revolution. This dissertation hopes to build the beginning of a basis for a theory for strategic leadership. Most texts of strategy cover the conceptual models fairly explicitly. However, given that we are in a transition stage from one worldview to another, fundamental assumptions about how we organise, work and hence see the world are questioned and becoming invalid. This therefore calls for a rethinking of the fundamentals that underpin the process of strategy and the models embedded within the various processes.

This dissertation highlights the critical concerns for strategy given that there is a shifting worldview. The dissertation covers the basic evolution of organisational design to current practices and thinking. Most importantly the basis for thinking about strategic processes, given that traditional models of organisational design and strategic management fail within the current context.

The question for strategic management, is "what next?"

- We know that we cannot predict the future.
- We understand that there are limits to the speed of growth and more definitely for development.
- We can see the limits of management but are still attempting to describe leadership and leadership practices.
- We understand the need for the creation of new approaches for organising work in a global context.

Such concerns and their relevance for organisational theory, particularly the lack of a general theory of strategy, has led this dissertation to focus primarily on three interrelated areas, viz. strategy, organisational design and systems thinking

It was also important to draw on the current failures of strategy in order to inform a position on understanding strategic processes. This dissertation in no way hoped to resolve the above, but rather to begin a process of building new strategic frameworks.

Another troubling problem of the strategy field is that there seems to be no deeper consideration given to the problem; that each school seems to further fragment the strategic processes and tends to divide, rather than create a synthesis. It is understood that defining the entire strategic field into one paradigm is not plausible. However, a deeper understanding of the fundamental assumptions that inform the different approaches to strategy will provide insight into the re-conceptualising of strategic processes rather than devising new strategic models. These processes of redefinition involves surfacing of assumptions so as to inform a synthesising (or convergent) process, which follows the divergent creative process. In the strategic field we have witnessed the creative strategic phase, and we now require a convergent approach in order to create new basis of knowledge for strategy. In essence, we need an improved understanding of the nature of the strategic processes rather than creating new tools and models. This requires understanding of complex relationships in interaction.

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CHAPTER ONE

INTRODUCTION

1.0. Introductory Overview

The development and implementation of strategy are important organisational activities. Mintzberg, Ahlstrand and Lampel (1998) identify familiarity with the strategy process, and the implementing of strategy as representing, for many MBA (Master in Business Administration) programmes, the culminating point of study. Indeed, it is difficult to dispute the logic of this. It is traditionally expected of organisational leadership that it will provide clear strategic direction for the organisations and that, in turn, the organisation will translate such direction into effective action. It is in this latter area, i.e. the translation of strategic plans (or policies) into effective action, that a great deal of difficulty has arisen.

The legacy inherited from the scientific management school- where thinking (planning) was separated from doing (implementing) appears to live on in the field of strategic planning and the analytical mode of problem solving. This separation, amongst the other concerns about strategy, causes the disenchantment with the very business of planning itself and, hence, how it should be undertaken.

Mintzberg (1994) in his critique of strategic planning, speculated on the inherent impossibility of the business of planning. Others, such as Porter (1996) and de Geus (1997), have looked for alternative planning approaches. Although Porter has maintained a predominately analytical approach, de Geus (and indeed others) have proposed an approach to strategic planning founded on a more organic view of organisations, hence affording capacity to respond more effectively in environments of change. In sum, a deficiency in the work of Porter is perceived to be its predominantly analytical approach to a dynamic behavioural problem as compared to the fundamental conceptual shift de Geus and others have suggested. The latter approach focuses on the capacity of the organisation to learn effectively, hence the concept of the learning organisation, initially popularised by Senge(1990). Others, such as Welch (2001) have lent qualified support to the core ideas of the learning organisation, seen to give organisations the capacity to be more responsive in turbulent environments. The

learning approach to planning will be explored in more detail later. At this point it is sufficient to note disquiet in the community of strategic planners, leading to diversity of approaches to the planning task. These diverse approaches have recognised the significance of factors not only inside the organisation but also in its environment.

Taken collectively, approaches to strategic planning have come to recognise (albeit incrementally) that the mechanistic world of the closed system (means-ends rationality) operating in a stable environment (which, in any event, could be left out of account) is no longer tenable. Ackoff (1999) and Sheldrake (1994) amongst others, have comprehensively argued the need for a worldview founded on connection and relationship, rather than fragmentation and separation within the organisation. They have also argued a holistic conceptualisation of the organisation relative to its containing environment to form a holon (See Figure1.1). The strategic challenge for organisation is to seek to maintain multiple points of stability within an environmental context of change and flux, where the organisation itself is not abstracted from the environment but is an integrated, influencing part of it. Maintaining a semblance of stability and direction in a chaotic world, where that which is "unknowable" (even beyond measures of statistical probability) is the challenge which confronts contemporary strategic planning. Welch (2001) captures the essence of this sentiment, speaking of

> *"strategy not being a lengthy action plan but the evolution of a central idea through continually changing circumstances".*
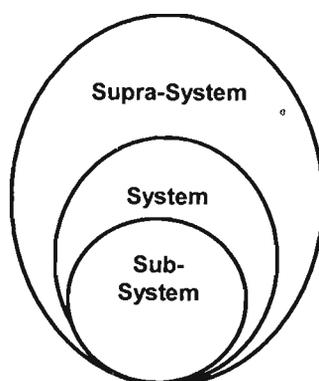

Figure 1.1 The "holon"

Our world is indeed a turbulent one. Carley and Christie (1992), described how turbulent environments impede the ability to plan for the purposes of arriving at coherent definitions of ends and means, and, at the risk of being repetitive, how the very act of intervention creates further turbulence, increases uncertainty, and frustrates control. This implies a form of complexity, which cannot fall within the sequential mould which characterises much of the conventional approaches to strategic planning

> "…….study the problem, develop alternatives, choose one, implement, move on to something else…….".

There are indeed no simple mechanisms for managing uncertainty or complexity. At best, an attempt can be made to accommodate complexity through innovative and responsive management. Capra (1996) and Wheatley (1997), for example, promote the view that organisations need to survive in a "quantum world" of confused and changing relationships and circumstances, reflective of the confusion and complexity of society at large. Newton's science of determinism, which profoundly informed the practice of scientific management, has been challenged by the science of relativity and the concepts of rapidly changing time-space relationships, the latter made tangible by writers such as Jaworski (1996) and Sheldrake (1994). The essence of this challenge has been to emphasise the impossibility of "command and control" as a viable means for the leadership of organisations.

The ability to manage the "interfaces" between individual and individual, between individual and organisation, between organisation and society and between society and the global community is essential. There is nothing in contemporary organisational literature to suggest an alternative to holism, nor to collaboration, nor to the uncertain and the temporary, nor to enhanced capacity to learn. These things must define the business of the business in the future. These things must also come to define the manner in which business conducts its business, including the process of planning and how it organises in order to give effect to its plans.

The foregoing alludes to the changed nature of the organisational world and consequent impacts on the ability to engage in means-ends planning. Organisations do, however,

depend on effective strategy making and implementation in an attempt to approach decision making in a structured and efficient way so as to make the best use of their time and resources (Van der Heijden, 1996). In fact one of the governing assumptions of strategy and planning is the principle of rational utilisation of resources articulated within a ordered framework, which implies organisations ability to be rational is in its planning process (Mintzberg, 1994).

1.2   Current Issues in Strategic Management

Although not exhaustive, the following represents a review of current issues seen to be relevant to the business of strategic planning. The issues are recorded as "internal" and "external" and, as stated in the introduction, are perceived to form that part of interaction, which generates structure and form. Taken collectively they represent the context in which planning occurs, hence creating the environment within which plans are made and executed.

The existence of any particular organisation design is the result of the environment in which the organisation operates and the nature of the organisation's product. Any organisation that seeks to survive in a competitive situation must recognise the rate of technological development and be able to respond adequately to information flows received from its environment. A simple representation of this relationship is demonstrated as:

$$\textit{Rate of change (internally)} \geq \textit{Rate of change (externally)}$$

In order to understand this more fully, it is useful to consider the internal and external factors of note relative to the strategic planning process.

1.2.1   Internal

1. *Process:*   Strategic processes fixated on analysis mainly through a series of highly cognitive processes are flawed on the basis of three implicit assumptions.

These are:

- As previously mentioned, that strategic processes can be separated in terms of those who implement and those who create;
- that, via highly cognitive processes, a strategy will be created.
- that aggregated interrelated steps will come together in an integrated manner so as to function as one whole system

Mintzberg (1994) concluded that every failure of implementation is also a failure of formulation, i.e. inherent in the formulation process lies the failure itself, thinking and action as two separate activities. The separation of those who plan and those who do is also a symptom of the organisational dynamic- 'them' (planners) and 'us' (implementers). Van der Heijden (1996), in his explanation of the "processual" approach to strategic planning, who articulated that innovative and creative decisions in the strategy process can only emerge as a result of the interaction between people. The separation of the act of "planning" from the act of "doing" arises from the nature of the traditional approach to planning via the planning life cycle. To elaborate briefly, the *status quo* management adheres to is one whereby the budget for the forthcoming year is prepared; evaluation of forecasts based on historical data is made; plans are constructed and then implemented (van der Heijden, 1996). The planning life cycle guides organisations planning and implementation process in most cases. This rationalist framework of planning is 'flawed' in that the evaluation is based on a value assumption and subjective preference (Ulrich, 1983). In other words, an organisation that plans more rigorously must pre-conceive a defined market place, redefine the boundaries of the firm, evaluate its value positions and rethink its most fundamental assumptions about how to compete (Hamel and Prahalad, 1994). At the core of such an alternative process is the institution of a learning cycle[1] that fabricates a system of learning within the organisation.

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[1] Learning is a variety increasing process which improves the ability of the organisation to respond to increasing levels of complexity (Beer, 1985)

2. ***Organisational Boundary:*** Defining an organisational boundary[2] can be seen as defining 'what is the business of the business?'. Some of the key concerns are outsourcing, growing capacity through business partnering, suppliers and (possibly) customers. Hamel's (2000) idea of the business system or defining an organisational boundary refers to the decision-making process between contracting business functions out to the value network[3] and retaining functions within the organisation. The formal boundary of the organisation is defined by a business model whose basis is the nature of the relationships the organisation elects to construct. These, in turn, drive the value chain. In addition, globalisation and democratisation of the world economies have driven this process of the reconfiguration of organisational boundaries so as to provide new impetus to global economic growth. Defining organisational boundaries represents more than identifying organisational prototypes. For example, concepts such as the balance between market forms and hierarchies (Day and Wendler,1998), incubators or networked organisations are pursued as the new age organisational prototypes that will deliver the promise of growth. Without going into detail, the adoption of prototypical designs for organisations removes opportunity to deeply question the nature of organisation itself, as suggested at the beginning of this section.

3. ***Communication***: The framework necessary to implement a strategy calls for a structural alignment - the redesign of organisational boundaries - and an embedded relationship between purposeful strategic objectives and roles. Senge's (1990) approach to systems theory is that structure determines behaviour. Similarly a strategy is intended to function as the basis for the behaviour of the organisation, hence the structure of the organisation embodies strategic intent. It could be seen as the underlying principle of the practices of the organisation. For strategic functionality to occur, the people of the organisation must have an understanding of the whole organisation and their relationships to one another inside the organisation. This is defined as having an

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[2] Organisational boundaries can be defined by all parts of the organisational system that are within the boundary and everything outside the boundary is considered as belonging to the organisation systems environment. This defines not in an arbitrary manner the business system in question using empirical knowledge and value judgements (Ulrich, 1983).

[3] A value network are the suppliers, partners and coalitions (Hamel, 2000)

effective communication system. The key characteristics of such systems are interconnectedness and connectedness. 'Interconnectedness' (systems thinking), is about how things connect together while 'connectedness' (personal mastery), deals with an awareness of being part of the greater organisation and world rather than apart from the world (Senge, 1990).

In most cases strategy, and the roles people play in acting out strategy, do not work as a coherent whole, as was intended. The functioning of the whole system as suggested arises from the lack of effective communication. Without describing communication theory in detail, the breakdown occurs in the passing of information from one part of the system to another. The part of the system could be an entire department or one person and is not easily identifiable as the relationships are complex and changing. In a large organisation, with many levels of people, identifying these relationships is complex and simply defining a communication system, as attempted above, is an oversimplification. This is covered in greater detail in the systems section of this dissertation.

4. ***Organisational politics/power:*** Strategy can and is corrupted because of vision interests. People can share opinions without disagreement and reach a point of *thinking together*, but when we defend an opinion we can't attain this level of thought (Bohm, 1996). Organisation must create evolving and multiple visions of the future they intend to develop and they must also do this in a shared capacity within the organisation. Entrenching an organisational ability to create shared vision is to *think as a collective*. The practice of this however is an intricate process of dialogue between the individual's mental model[4] and a shared vision of the organisation. The degree of influence organisational politics/power exerts over the strategy process is managed through individual mental models shifting, forming part of and changing the shared vision of the organisation. This is an element of change management, the relationship between a changing environment and organisational adaptability to changes without sacrificing its core ideals (De Geus, 1997). Organisations anticipating

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[4]. Mental models are deeply embedded assumptions, generalisations, and at times pictures or images that influence how we understand the world and how we take action (Senge, 1990).

external changes nonetheless cannot influence an organisational change if the individual assumptions are in conflict with the shared vision of the organisation. The relationship is a balance between personal interest/power and the organisational goals. Although the relationship is bounded within the survival needs of the organisation, the principle is that individual assumptions are being surfaced and people are acknowledging and communicating their assumptions. Building shared vision and a process of developing a strategy that is inclusive involves a convergence of mental models. Bohm (1996) refers to this process as *limited dialogue*. Limiting the potential for organisational politics/power corrupting strategy necessitates *limited dialogue* as a component of strategy making.

5. ***The Corporate Citizen:*** The role of organisation has changed e.g. to accommodate the emergence of the notion of the 'corporate citizen', introducing new and different concepts of what should be planned for (boundary issue) in the broader social and environmental domains. This brings the concepts of ethics and morality judgements into play as part of the organisational planning process.

Although currently not the norm, an appreciation of the significance of global systemic issues, as embodied in the notion of corporate citizenship, will increasingly be facilitated by greater individual mobility within the global system.

6. ***Complex Adaptive System:*** The system[5] we most often refer to when we endeavour to solve problematic strategy is that of organisations and its relationship with the environment. The environment that we are concerned with when we speak of the "organisations' environment" is a set of *elements* and their relevant properties, these *elements* are not part of the system (organisation), but a change in any can produce a change in the state of the system (organisation) (Ackoff, 1999). The environment in the diagram below (Figure 1.2) is sketched as a dotted line to indicate that an industry boundary is not clearly defined as we understand it in traditional economic and strategic theory. The rationale for this conclusion is fully argued in later sections of this dissertation.

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[5] "...a system has come to mean an integrated whole whose essential properties arise from the relationships between its parts, and *systems thinking* the understanding of a phenomenon within the context of a larger whole." (Capra, 1996).
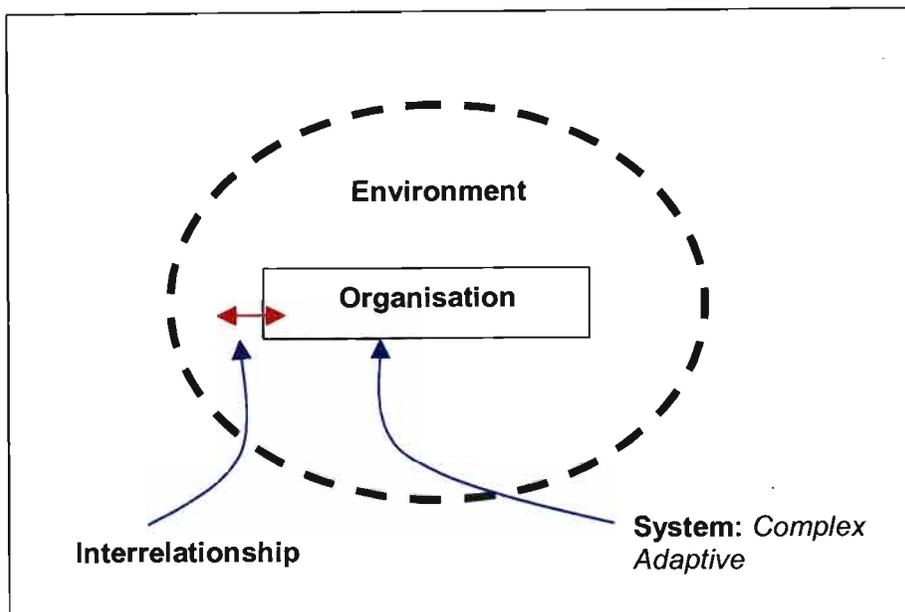
Figure: 1.2 Relationship between Environment and Organisation (i.e. system)

For the purpose of the argument we are specifically referring to an *interrelationship* between environment and organisation. This means that the environment influences, and is influenced by, the organisation, hence the organisation influences, and is influenced by, the environment. Holding this relationship as valid, it is proposed that organisations are similar to *complex adaptive systems*. Ackoff (1999) defines a system as being adaptive when:

> *'there is a change in its environmental and/or internal state which reduces its efficiency in pursuing one or more of the goals that define its function(s), it reacts or responds by changing its own state and/or that of its environment so as to increase its efficiency with respect to that goal or goals'.*

Complexity can be defined as the number of possible states of a system and we define measurement of these states in terms of variety (Beer, 1985). Complexity describes the structure of the system and adaptive indicates behaviour of the system. A *complex adaptive system* is a system that is able to change itself or environment and maintain concurrently many different states of the system so as to

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maximise efficiency in achieving a predetermined strategy. The setting out of predetermined goals that limit the system from behaving outside the needs of the organisation. Whilst the system is adaptive it does so in order to satisfy the organisational strategy. In doing so we say the organisation (system) is *goal-seeking*[6] and is bounded within the limits of its strategy and not the organisational structure. This is important for a systems approach to strategy in that we are applying principles that are behaviour based and that organisations are not defined in terms of their hierarchy or business units. These conclusions and their relevance to complex adaptive systems are discussed in detail in the systems section.

1.2.2 External

1. ***Globalisation:*** This is perhaps one of the profound changes affecting worldview. Although it defines many different social, economic and political changes, the implications of globalisation have still to be realised. This is a common statement, however in understanding the statement it has different meaning for different contexts.

   Globalisation can be defined as:

   > *"The process by which the world's economy is transformed from a set of national and regional markets into a set of markets that operate without regard to national boundaries." (Fraser and Oppenheim, 1997)*

   This definition falls short of conveying the true scope and scale of globalisation. All 'isation' verbal nouns refer to change and in the case of globalisation it is used to refer to the *processes* of change in life and social activity (Albrow, 1996). Globalisation has also been used as a metaphor to describe processes such as technological advancement, movement of capital, modernisation and rationalisation (Albrow, 1996).

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[6] "…is one that can respond differently to one or more different external or internal event in one or more different external or internal states and that can respond differently to a particular state (outcome). Production of this state is its goal. Thus such a system has a *choice* of behaviour. A goal-seeking system's behaviour is responsive, but not reactive." (Ackoff, 1999).

It is critical to this discussion of globalisation that we conceptualise it within a framework of purposeful organisation and its relationship with the socio-economic system. The case for a more sophisticated approach, that includes the relationship between purposeful organisation and globalising systems, begins with understanding that there is a dynamic inter-relationship between social systems, business and government. Ransome (1999) makes the argument that society has always been impacted upon by changes in the industrial labour processes and to assume that work is not an influencing factor on social processes would be grossly inaccurate. Organisations therefore have the ability to influence social processes through the manner in which they partner and interact as business and government. The nature of current change and the dynamic relationship between social processes and organisations however is influenced by the new technological paradigm. Castells(1999) outlines this new paradigm as having two critical differentiating elements:

- Core new technologies are focused on information processing
- The main effects of innovations are on processes and not on the products

Castells' argument further suggests that processes, unlike products, enter into all arenas of human activity and it is the transformation by such technologies which are reliant on "omnipresent flows of information" that lead to the change of the basis of the entire social organisation. The unique web of interaction between technology, information flows and social organisation define in most part the nature of the new socio-economic structure. The social process of globalisation hence challenges models for organising and structuring work.

Globalisation has been characterised as:
- Integration of the world's capital markets;
- Liberalisation of national and economic barriers;
- Potential to leverage knowledge resources globally.

Albrow (1996) has offered a broader perspective:

- The shaping of human activity with the globe as a focus;
- The influence over people's lives by global practices, and;
- The process of making or being made global in all instances.

The nature of the above changes presents for the organisation an opportunity for redesigning of an organisational model that can exist in a symbiotic relationship within environments that are becoming global. The focus for organisations therefore needs to be in the evaluation of the relationships between technology, information flows and socio-economic structures. The rationale for a focus on the relationships between these structures, is based on the principle that globalisation is fundamentally about integration of various structures and the creation of one interrelated system. The attention therefore, for organisations, should be on the nature of the interaction and the integrative processes rather than understanding individual characteristics of each dimension of globalisation. In such a case behavioural aspects of the system provides greater insight for decision-making. It can therefore be argued that globalisation further reinforces the case of knowledge economies fundamentally changing the organisational paradigm from command and control to responsiveness and influence.

2. ***Corrupted Nation State:*** The processes of change that characterise globalisation have been described. The implication of globalisation as Friedman (1999) suggests is careful balance between nation state and the global market place as a result of millions of people transferring money around the world at the click of the mouse. He termed these investors "the Electronic Herd". The Electronic Herd gains a greater power base as the economies of the world deregulate and liberalise. Cross-border capital flows rose from $536 billion in 1991 to $1,258 billion four years later (these totals exclude foreign direct investment from an average of $26.2 billion between 1986 and 1990 to over $250 billion by 1996), world's stock of liquid financial assets grew from $10.7 trillion in 1980 to $41.5 trillion in 1994 (Fraser and Oppenheim, 1997). The power of decision-making shifts into the basins of the global market with control far from the reach of governments. At the global level the locus of economic control and

political decision-making on economic matters is in no one's control. The flow of capital in global markets is increasing; consequently the power to access capital is vested outside the control of the national economy and has caused concerns to be raised surrounding the legitimacy of the state in managing the national economy (Fraser and Oppenheim, 1997). Primarily capital flows in the global market have accomplished the change of control in power. Organisations are our mode of fastest development in large-scale economies in an economy that is driven by the technological paradigm outlined above. Castells (1999) argues that although small business plays a role in the investment and job creation, their role is auxiliary in relation to the processes that rely largely on advanced mechanisms of the global economy and hence it is merely large-scale corporations and public bureaucracies that have the capacity to manipulate these mechanisms. The major influence with regard to capital flow lies in the power of the decision-making processes of large organisations. Therefore organisations cannot abdicate their responsibility in the global economy particularly when their role is determining the means of capital flows. This influence might remain as the status quo of global systems, however with an increased democratisation process, and the search for the new organisational form that seems to be fragmented, that is one spread geographically and with a variance in size and autonomy, the power residing solely in large institutions is seriously questionable.

3. ***Democratisation:*** Friedman (1999) suggests the electronic herd will pursue democratisation for three reasons – flexibility, legitimacy and sustainability. In attempting to make the globe the focus, the conceptual model is to seek to create one 'system' within which all other systems are subsumed. It logically follows then that to move from the current status of separate nation states to that of one 'system' we are required to unbundle many of the complex laws and regulations that were created to maintain separate nation states. The uniqueness of our current situation is not that we are moving toward a global existence, but that it is occurring in conjunction with a shift to a new technological paradigm. It is also no coincidence that each of these fundamental changes are not mutually exclusive, where the relationship of one further enhances the capacity of the other. Increased democratisation and a society that has increased its influence

through a communication network that creates one society around the world – the electronic herd - has given us the emergence of the relationship between the individual against the nation state. Today there is the emergence of the Super-empowered individual that has the power to compete with the nation states (Friedman, 1999). The challenge of power is not limited to the boundaries of the nation state, the challenge is also against the 'Super-Corporate' organisation as the one source of influence. As interaction costs[7] fall, the flow of information and skills across borders become more accessible (Butler, Hall, Hanna, Mendonca, Auguste, Manyika and Sahay, 1997). The traditional laws of organisation further disintegrate as the individual has the ability to trade across geographical and time constraints. Organisations traditionally design their structures to maximise turnover and minimise the cost of production, a single governing point of equilibrium. The transaction cost incurred to manage the process of producing a product is governed by the organisational configuration. Traditionally organisations face the condition of cheaper production costs internally and specialists as suppliers that are external to the organisation (Butler, et al., 1997). The transaction cost of managing this process is generally high, however with the barriers of separation and time being deconstructed the cost of these transactions are set to decrease. This is one of the primary drivers that are allowing organisations to create configurations that normally defy traditional laws of organisation. It must therefore be highlighted that democratisation and the empowered individuals is not simply a change in social structures with an affect on the nation state, but forms of organisation must take notice of this change as well. The industrial dynamics of maximisation through solving for a single point of equilibrium is no longer valid as a primary basis for organisational structure and form resembling mass production systems. The cost structures, space-time relationship, a democratising world and the empowered individual are characteristics of this volatile age that are changing the very nature of how we understand change itself. This one system, the global system is more than merely integration of nation and regional economies; it has implications for

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[7] "…the searching, coordinating, and monitoring that people and firms do when they exchange goods, services, or ideas…." (Butler et al., 1997)

organisational forms (hierarchy, functional, matrix, project, networked, etc) and the management of these forms.

4. **Uncertainty:** *"It's aggravating – we have nothing to do with Russia or Asia. We're just a little business trying to grow, but we're being prevented because of the way those governments run their countries." - Douglas Hanson, CEO of Rocky Mountain Internet, Inc., speaking to the Wall Street Journal after the 1998 market meltdown forced him to postpone a $175 million junk bond issue* (Friedman, 1999). The concern that is being voiced is that control based on certainty is ineffective as the sole model of management. Douglas Hanson was highlighting that his business is impacted upon by other foreign policies that have little to do with the direct operations of the domestic business environment.

Van der Heijden (1996) points out that traditionally the approach to strategy has been to eliminate uncertainty from the strategic equation, by the assumption that there are 'experts' who have privileged knowledge about 'the most likely future' and can evaluate the probabilities of specific outcomes. In a world that is in process of becoming global, the power of decision-making is not in the control of one authority, nor is the effect of the decision limited. The idea that we can control through prediction by 'experts' is a fatal assumption of those who believe we can control the behaviour of the environment. An assumption of such a nature is more likely to be valid in industries that are highly regulated and protected. It is in no way being suggested that such industries are always protected from the impact of global or local economic systems.

Managers on a regular basis make informed decisions based on an evaluation of the future uncertainty. The tools and techniques used to produce such an evaluation are based largely on the definition of uncertainty and the ability to manage it.

There are at least two known sources of uncertainty potentially impacting any process of planning.

They are:

- Randomness – which unsettle and make control difficult
- Major discontinuities – e.g. OPEC (1973), WTC 2001

In the light of this knowledge, what planning responses have arisen? A major response has been that of scenario planning, as documented by van der Heijden(1996) which anticipates multiple futures in the context for planning. The basic assumption underpinning scenario planning is that planning should occur within a framework of plausible possibilities:

- Different relationships – the number of relationships are larger and more fluid. Effective control of the environment is not possible; actions in the environment change the nature of environment; because of IT, information flows negate perceived advantage; communication technology fuels greater openness and freedom to expand.
- Create the adaptive learning system which is capable of rapidly evolving to new states (biological metaphor).
- Looking for the identification of planning processes which consider those core ideas of system and complexity thinking as fundamentally informing a more effective planning process, leading to a sound implementation practice, so as to create a 'surviving' organisation.

From the foregoing, although not exhaustive, it should be apparent that strategic planning is a profoundly complex and uncertain enterprise, considerably removed from the early analytical approaches (e.g. Ansoff, 1984). As this work will explore, it is not clear that a clear, unambiguous successor to the analytical approaches has been found. Nor is it clear that organisations have adjusted to the implications of a non-deterministic world.

Organisations have long recognised the need to adjust to changing environmental circumstances. Burns and Stalker (1963) identified the generic mechanistic and organic forms of organisation (the latter typified by the now familiar matrix organisation) intended

as a response to complex organisational problems. The matrix organisation was characterised by the need to bring diverse functional skills to bear on complex intra-organisational projects. In this regard, the matrix organisational form is well proven, even though not totally unproblematic.

This study does not have the purpose of explaining the problems of the matrix form, but rather to indicate that organisations have sought the means to manage complexity through structural adjustment. The current operating context, as previously, explained, is one of such profound uncertainty that the very basis on which organisational planning and action is conducted, must be open to scrutiny.

With few exceptions, organisations are not structured so as to be responsive, networked entities. Gladwell (2000) has, for example, alluded to size as a key variable in this regard. Size is one possible variable amongst many. In itself it calls one element of organisational design into question. Are the conventional wisdoms and paradigms still robust enough to support organisational effectiveness in a turbulent world? Senge (1990) speaks of organisational structure as the fundamental element in the process of change and the ability to be different. His argument that structure drives events, and response to events, has relevance for the effectiveness of the planning process where it is considered that attention to structure influences effective implementation of strategy. The time may well be appropriate for organisations to re-consider how they might best be structured in a quantum world in the interests of more effective strategic arrangement.

Effective strategy making is therefore a combination of sets of actors, namely:

- o Those "internal" to the organisation
- o Those "external" to the organisation and therefore perceived to form part of its environment
- o Those pertaining to organisational structure which is conceived, in this case to represent the area of interference between the "internal" and "external" factors

Recognition of those factors is important to the purpose of this study and will form an important background to the review of the various approaches to strategy making which follow.

The purpose of this dissertation is to:

- o Review the various approaches to strategic planning
- o Consider the development of organisational thinking, specifically focussing on the organisation/environment interface as a determinant of organisational form
- o Consider the implications of systems thinking and the current popularity of the concept of the learning organisation for strategic planning
- o Provide a system for categorising the diverse schools of strategy in order to propose a system of strategy approaches.

In pursuit of these objectives, the dissertation is structured as follows:

- **Chapter 2: Overview of approaches to strategy**. This chapter presents information relative to, and critique of, approaches to strategy making and implementation. Each approach is reviewed in terms of its essential characteristics. This is followed by a detailed consideration of the relative strengths and weaknesses of the approach. The chapter concludes with the proposition that, while the various approaches each have merit, there is an acknowledged need for some process whereby the approaches be systematised for more appropriate use.

- **Chapter 3: Organisational Design**. This chapter considers the role of organisational design, specifically focusing on networks, relationship and size as key variables affecting the capacity of the organisation to learn and respond to strategic opportunity.

- **Chapter 4: A Systems Approach**. This chapter considers the nature of systems thinking and the role of systems thinking relative to the formulation of strategy, given the arguments presented in Chapters 2 and

3. The chapter proposes as method for the consideration of diverse approaches to strategy within a systemic framework. The use of organisational metaphor is seen to be an important element in the creation of this framework.

- **Chapter 5: Conclusions**. This chapter seeks to provide some closure by way of guidelines for strategy formulation from a more holistic perspective. It also seeks to provide some directions for future possible research in what is undoubtedly a complex field with many dimensions.

CHAPTER TWO

OVERVIEW OF APPROACHES TO STRATEGY

2.1   Background

Strategy making has received great attention in the past decade. In common with many management fundamentals the formulation of strategy is being questioned due to experiences of failure in dealing with uncertainty, which characterises our times.

Many management texts today are concerned with increasing change, unpredictability, volatility, shifting worldviews, complex problems, growth and survival. This is to be expected in a world engaged in transformation from one 'state' to another, hence the questioning of fundamental principles upon which organisations are premised. Ackoff(1999) refers to this state of transformation as being "a change of age" wherein the fundamentals of social transaction are being questioned and gradually modified. The dilemma that most commonly emerges out of much of the literature is *'How do we successfully guide our organisations into the future?'*

However organisations can be seen as having possibly one fundamental need, that is, *the need to survive and grow.* Assuming that this is one of the fundamental laws that govern the behaviour of organisations, strategy would necessarily be a primary organisational function. In support of this, De Geus (1997) explains that organisations exhibit many characteristics and behaviours of a living organism actively seeking to increase its life expectancy.

Over time, many approaches to the development of strategy have emerged. The remainder of this chapter is devoted to a further elaboration of the meaning of strategy and then moves on to a brief explanation of approaches to strategic planning and the limitations of each approach. Each strategy model has a basis in a school of strategy. The crisis that management, and particularly strategy currently faces, is that many of the schools of strategy fail to deliver on a promise because of an operating environment that

is moving away from traditional principles[8] of 'economics and management'. Added to this is the growing perception that the behaviour of systems in general exhibit complex behaviour.

2.2.   What is Strategy?

Strategy has been variously described. It has, for instance, been described as planning for the future. It has also been described as the policy that governs the organisation. Strategy has been used to provide the goals and vision for the organisation, and strategy has been described as the path the organisation is required to follow in order to achieve its desired future.

"Strategic Management is a systematic approach to a major and increasing responsibility of general management: to position and relate the firm to its environment in a way which will assure its continued success and make it secure from surprises." (Ansoff, 1984)

Mintzberg, *et al.*(1998), outline that in most standard textbooks on strategy the definition of strategy which is offered is usually as follows:

"top management's plans to attain outcomes consistent with the organisation's missions and goals".

A comprehensive review of the literature reveals that strategy is a complex field and one simple definition does not exist. Mintzberg *et al.* (1998), contend that strategy has five different definitions as follows:

- Strategy as a plan (intended)
- Strategy as pattern (realised)
- Strategy as position

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[8] Traditional economic theory is built on the assumption of diminishing returns. Diminishing returns imply a single equilibrium point for the economy, positive feedback-increasing returns – suggests many possible equilibrium points. Furthermore there is no guarantee that the economic outcome selected from the various alternatives will be the 'best' one. (Arthur, 1994)

- Strategy as perspective
- Strategy as a ploy

- **Strategy as a plan (intended):** Organisations always plan for a future. Planning is about predetermined outcomes that the organisation intends to achieve. This means that planning is also about control and a predetermined future of the organisation with the intention of limiting risk. In effect it is about decisions that are interrelated which occur over a time period (Ackoff, (1970), in Mintzberg, 1994). The process of coordinating various interrelated decisions that converge at a single point, that is the objective, describes the complexity in the planning process. If, the planning process has been able to achieve all intended outcomes, it has defined and achieved the 'perfect plan'. The idea of a 'perfect plan' is an illusion and an ideal that is unattainable. This definition of strategy making has it roots in the planning school of strategy. The planning school also accepts the position that plans are not always intended but can also emerge (Mintzberg, *et al* 1998). This flexibility in the planning model allows for strategy to be defined in terms other than predetermined, namely strategy as a pattern.

- **Strategy as a pattern (realised):** Strategy defined as a pattern describes behaviour that is repetitive over a period of time. Repetitive or reoccurrence of behaviour presents consistency in the behaviour of the organisation within a period of time. Senge(1990) explains that such patterned behaviour is driven by the structural elements of the system. This thinking derives from the divergence between that which is "intended" and that which is "realised". If all intended strategies are realised it is a 'perfect plan'. If all the intended strategies are unrealised, then there is no achievement of a plan. These are two extreme concepts- realised strategies and unrealised strategies- at either end of a strategy continuum. Mintzberg, *et al.* (1998) brought to attention the concept that not all realised strategies are always planned or intended. A pattern that is not intended is an emergent strategy. We must not only create an organisation that is able to make predictions, but is also has the ability to adapt to changing needs as they emerge, hence the organisational theory of learning and flexibility.

- **_Strategy as a position:_** In a Harvard Business Review article 'What is Strategy', Michael Porter(1996) defined strategy as "the creation of a unique and valuable position, involving a different set of activities". There are three options Porter suggests on the positioning perspective:

  1. **Variety-based**: producing a subset of an industry's products or services, for example product packages with various derivative options of the product range is an example of this strategy.
  2. **Needs-based**: this focuses on meeting a particular need of a customer group. South Africa has a market that requires access to telecommunication, hence the demand for cell phones.
  3. **Access-based**: this involves segmenting customers who are accessible in different ways. The LSM 8 market is the fastest growing market with sufficient disposable income hence cell phone growth potential is in the LSM 8 market.

  In this approach to strategy, the organisation positions itself relative to a market that then determines the choice and configuration of activities the organisation requires in order to successfully deliver it's product. This is product, customer and market orientation.

- **_Strategy as perspective:_** Mintzberg, *et al.* (1998) suggest that when strategy is viewed as perspective, it is the grand vision of the organisation. Perspective is based on the perceptions inside the heads of the strategist and therefore comes from inside the organisation. Argyris(1994) and Drucker(1994) placed great emphasis on the influence of perceptions and mental models on behaviour of the organisation. Here strategy is put forward as being influenced by mental models of the strategist. Scenario planning advocates that it is the mental models of managers and strategy planners that prevent the organisation from anticipating discontinuities or risks that are beyond the framework of their current mental models of the future.

- **Strategy as a ploy:** This simply is placing the organisation in a position that it is able to 'outwit' its competition.

2.3. Schools of Strategy:

The five definitions of strategy outlined above can, in turn, be located within ten schools of strategy. Mintzberg, *et al.* (1998) distinguish the ten schools of strategy as follows:

- The Design School
- The Planning School
- The Positioning School
- The Entrepreneurial School
- The Cognitive School
- The Learning School
- The Power School
- The Cultural School
- The Environmental School
- The Configuration School

The first three schools are the rational and prescriptive schools. The other schools belong to the non-rational, non-prescriptive schools.

2.3.1 The Design School

2.3.1.1 The Basic Model

The design model was an evaluation of strategy by scanning the environment for threats and opportunities while appraising the internal for strengths and weaknesses (SWOT analysis). The external scanning was based on Porter's (1980) positioning theory. Once an evaluation and appraisal was complete, one best choice is made from the different alternatives. Once the decision-making occurs, it is implemented. This is a process of divergence with various decision options and then convergence to one decision. In the implementation process, divergence occurs once again as several

options arise as a result of different ways of doing. As Mintzberg, *et al.* (1998) indicate, this school formed a basis from which other schools could grow. There are a great number of strategic exercises that are still focused around using SWOT analysis as their basic framework.

2.3.1.2 Weaknesses and Failures of this Approach

- *Responsibility for the control and creation of strategy is with the chief executive officer:* There is only one ultimate strategist, the manager that is at the highest point in the hierarchy. The decision making of the organisation occurs at the top of the organisation and is then implemented from the top down. This is fundamentally a 'command-and-control' system. This model also implies that information necessary to evaluate options can be transferred from the coal-face of the organisation up the hierarchy. As Ackoff (1999) has pointed out, aggregated information does not necessarily provide synthesised information. It is however a fundamental assumption of this model that aggregated systems will combine to function as one complete system, i.e. synthesis.

- *A separation of action from thought:* The evaluation process is one that is highly analytical and occurs as a thought process in the mind of the CEO. The concept that a strategist, by only analytical processes, can identify future competencies is a typical example of a theoretical exercise with no action. Defining the business of the business requires both the benefit of experience driven by results as well analytical processes. A natural product of this separation process is that there are "thinkers" and there are the "doers" in the organisation. The thinkers are believed to typically locate at the top and the doers locate lower down the hierarchy.

- *Structure follows strategy... as the left foot follows the right* (Mintzberg, *et al.* 1998): Chandler (1962) expressed the view that structure follows strategy. By definition this phrase implies that for every new strategy devised the structure of the organisation is altered. The design model intends to remove the past from the strategy formula. This ignores the role of "learning" as a fundamental element in the implementation of strategy. Capacity to learn and unlearn is key to

unlocking new futures for the organisation. This capacity is also one that is not easily developed. The other disquiet with the approach is the proviso that strategy will take precedence over established organisational habits and customary practices/capabilities embedded within the organisational structure (Mintzberg, *et al.* 1998). The belief that merely changing the structure so as to give effect to the CEO's strategy is simplistic. Structure and strategy development both support the organisation as well as inform each other (Mintzberg,*et al.* 1998).

- *Making strategy explicit: promoting inflexibility:* It has long been the argument that predetermined, prescriptive strategies that are created as being the one best strategy often prevent flexibility and to a greater extent prevent change. Once a strategy is explicated and implemented as being *the one*, the organisation writes into it's wiring the assumptions that underpin the strategy. This forces out other assumptions that may arise due to uncertainty and environmental drift as being invalid and places the organisation in greater danger, as the manager is unable to comprehend other alternatives as valid. The concept that all the decisions and influences within an organisation are quantifiable within a short time period and quantifiable by a few individuals is a fallacy. It also implies that individuals can quantify and measure all the elements in the environment that influence the business decision-making process. The environment is treated as another component of the process that can be measured and controlled. In such cases we must come to understand that there are variables that have not been quantified or evaluated and therefore fall into the realm of uncertainty. Therefore specifically explicating a strategy and enforcing it into the organisation as the only one, forecloses on the possibility for change when the need does arise.

2.3.2   The Planning School

2.3.2.1 The Basic Model

The planning model is an elaboration of the design school. Planning as an idea has permeated almost all facets of strategy. The basic planning model could be said to

consist of several elements, firstly a set of clearly defined steps and each set of steps is further analysed into a series of checklists and tools. Secondly each step, in its totality, is defined by an objective and in its parts is detailed in budgets and operating plans. This is diagrammatically represented in a flow chart (Figure 2.1).
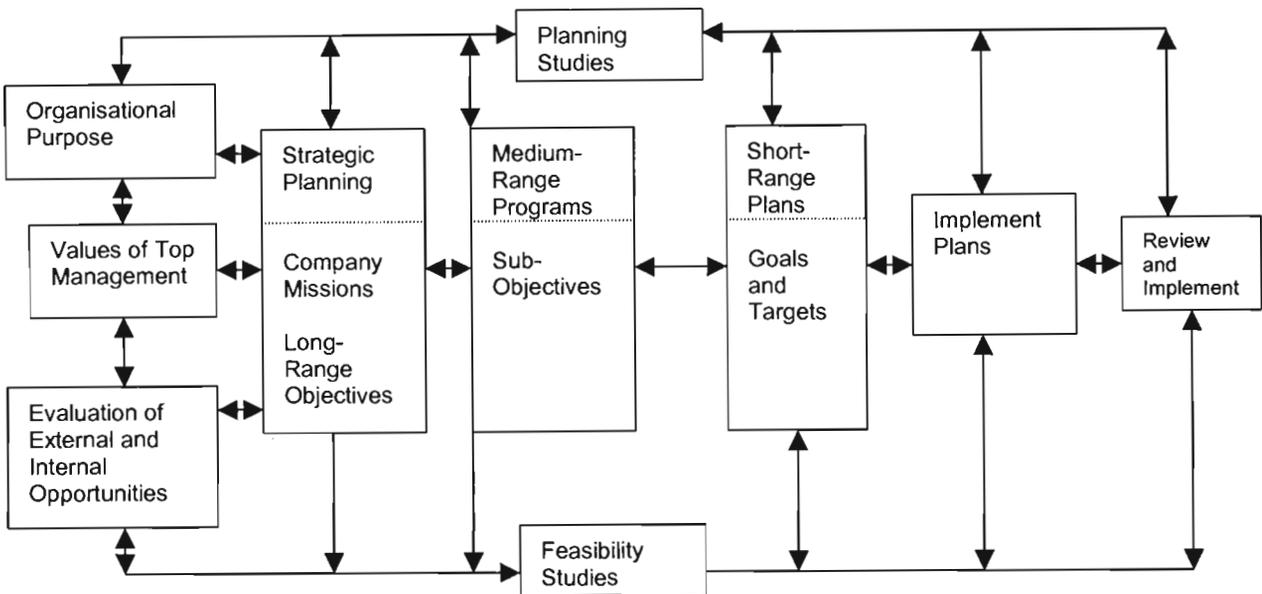
Figure 2.1 The Steiner model of Strategic Planning (Source: Steiner, 1969 in Mintzberg et al, 1998)

Mintzberg, *et al.* (1998) summarize a typical planning model as:

- The Objective-Setting Stage: The quantifying of the goals of the organisation and referred to as the objectives.
- The External Audit Stage: This process is similar to that of the design school and is a scan of the external environment. This was in the form of forecasts about future conditions. This model also intended to control but was performed in terms of predictions about future conditions upon which plans were then based.
- The Internal Audit Stage: Strengths and weaknesses of the organisation were evaluated however the planning school strongly believed in applying the principle

of detail analysis therefore distinctive competencies of the organisation were analysed in detail.

- The Strategy Evaluation Stage: The planning school developed a long list of techniques such as return-on-investment, competitive strategy evaluation, risk analysis, value curve, market-to-book value of the firm and cost of equity capital.

- The Strategy Operationalisation Stage: Planning has a preference for formulation, hence formulation is strictly controlled while in implementation due to its method of further analysis and decomposition allows for 'elaborate, rationalised and ever-widening hierarchy'

- Scheduling the Whole Process: The steps in the process and the timetable by which they are carried out has to be programmed

2.3.2.2 Weaknesses and Failures of this Approach

- *Based on the premises of the Design School:* The planning school was an elaboration in greater analysis and detail of the planning school. The planning schools need for analysis and detail in a formalised approach was what the design school lacked. The planning model, as Mintzberg, *et al.* (1998) indicate, was mechanical and programmable in its approach hence the elaborate sequence of steps as compared to the design school. The assumptions of the mechanistic approach that analysis brings synthesis are applied in the model of planning. Due to the approach of formalised decomposition mainly operational issues were of concern and very little attention is given to the actual creation of strategies.

- *Planning inflexibility:* Plans establish definitive objectives that the organisation is intent on achieving in some future. The process of planning whereby detailed control systems are devised and followed through in a sequence of steps and checklists promotes the idea of stable structures not prone to change.

- *Predictability:* Long-range forecasting (two years or longer) is notoriously inaccurate. Forecasts rely on assumptions made in the present environment to remain valid in future environments. This requires an environment that is stable and predictable.

- *Fallacy of Formalisation:* Strategy making is an immensely complex process due to the most sophisticated, subtle and at times subconscious of human cognitive and social processes. Strategy requires insight, creativity, and synthesis of all the factors that planning discourages. Forecasting fails to predict discontinuities, institutionalisation to provide innovation, hard data to substitute for soft, and lockstep schedules to respond to the dynamic factors (Mintzberg, *et al.*1998).

- *Grand Fallacy of Strategic Planning:* Because analysis is not synthesis, strategic planning has never been strategy making. Analysis may precede and support synthesis by providing key inputs, it may follow and elaborate synthesis, by decomposing and formalising its consequences, but analysis cannot substitute for synthesis. Strategic planning should have been called strategic programming and should be used to formalise where necessary the consequences of strategies already in existence (Mintzberg, *et al.*1998).

2.3.3   The Positioning School

2.3.3.1 The Basic Model

The positioning school differed from the planning and design school in only one assumption. The planning and design school did not put any restrictions on the strategies that could be achieved. The positioning school argued that only a few strategies are available as positions in the market place and are desirable in any given industry. These positions can be defended against existing or future competitors. The defence against competitors is maintained as positions guarantee firms higher profits than other firms in the industry, which provide the resources to expand and to enlarge and consolidate. This school defined generic strategies such as product differentiation and focused market scope. The positioning school were able to develop a set of generic tools that were analytical tools dedicated to matching the right strategy to the conditions at hand. This moved away from the planning and design school as they suggest unique strategies needed to be developed for each organisation. Strategy moved into developing finely tuned analytical tools that identify the right relationships, thus the search began for statistically substantiated strategies.

Similar to the other two prescriptive schools, strategy making simply continued as controlled, deliberate strategies made explicit before implementation. The process focused more narrowly on the development of generic strategies. Although this school still used "strategy proceeds structure" thinking, it was specifically geared toward the industry structure. Analysts began to play an important role in this approach.

This school was built for the consulting world, as the consultant did not need understanding of the business, just of the generic strategies and the ability to analyse data. Arising from the work of Mintzberg *et al.* (1998), perhaps one of the best ways to classify the various positions in this school is to classify them according to four positions:

- *Single Static Research:* This seeks to define the generic strategy appropriate and find *relevant* data from the industry to match the strategy.
- *Cluster Static Research:* Here the strategist not only defines the individual position but weaves it into an integrated strategy. This would imply that competitors in the same industry might pursue similar strategies but consider other factors as well, such as access to resources and markets. Porter (1980) conceptualised these factors through the idea of mobility barriers.
- *Single Dynamic Research:* This type of work is more difficult and therefore not as common, but attempts to deal with more dynamic features of the market such as breakthrough technologies, developments in investment in that industry and also attempting to watch for signalling changes.
- *Cluster Dynamic Research:* Here we consider the clustering of dynamic behaviour such as evolution of industries i.e. life cycles, rise and fall of competition.

2.3.3.2 Weaknesses and Failures of this Approach

Porter (1987) in an article in *The Economist,* claimed that "I favour a set of analytical techniques to develop strategy". In the view of Mintzberg, *et al.* (1998) no one has ever developed a strategy through analytical techniques. It provides valuable input, can be used to extrapolate, but not produce a strategy. Hamel (1997) suggested in a Fortune

Magazine article that the 'dirty little secret of strategy is the it does not a have a theory of strategy creation'.

- *Concerns about Focus:* Positioning goes wrong by being too focused. It focused on the quantifiable and the economic rather than the political or social. The choice of leadership through cost advantages may have its preference simply because it has more hard data to substantiate.

- *Concerns about Context:* The positioning school can be critiqued for its context being too narrowly defined as having a bias toward big business. Porter (1996) in Competitive Strategy suggested how to consolidate fragmented markets but did not speak about how to fragment consolidated industries. This bias toward big business is also an indication of the stable conditions required for these approaches.

- *A schism:* This school suggests that the practitioner, on the one hand, studies carefully and moves generically and, on the other hand, moves fast and unexpectedly. Many of the problems arise in this school as a consequence of a bias toward the external at the expense of the internal.

- *Industries defined:* It is suggested that going back to basics might be appropriate to answer the importance of industry in strategy. Who defines and classifies industries in the first place? It is generally done by outsiders, economists, and researchers. But managers are the creators of industries and it is done through complex cognitive and social processes. So if industries do matter it should not be by the assertion of the positioning school.

- *Concerns about Process:* Another concern that is reinforced is that the strategist should be removed from the action part of strategy. The process of position school is based on calculating of numbers in the office and to become good at mastering calculations. Calculations as suggested in the planning school can impede learning and creativity. People are removed from the process as an analyst does his work with very little understanding for the details of the business. Hamel (1997) suggests that innovation does not emerge from calculations but from novel experiences that can create opportunities for novel insights. Calculations cannot add value to the imagination, commitment and emotional investment. Mintzberg,*et al.* (1998) suggest that optimal strategy

cannot be worked out in advance due to the issues that have been mentioned above.

- *Concerns about Strategies:* The position school can in essence be reduced to a formula, where such a position is selected from a restricted condition. Strategies that are generic promote codifying of the past rather than innovation. Some of the most important breakthroughs in strategy came from breaking the rules rather than following the rules. The positioning school focuses its attention on the generic, on industries that are established, on groups that have formed and data that is hardened. This approach is more deterministic than any of the others.

- *Why Porter's "What is strategy" may not be:* One of Porter assumptions in achieving his position approach to strategy is that the organisation must have operational effectiveness as a given. Any manager that works on day-to-day operations will tell you this is possibly one of the most important requirements. Porter continued to suggest that strategy was deliberate and deductive, which really ignores a learning and adaptive position. As suggested by Porter positioning strategy essentially fixes a position before strategy implementation begins and changes only after a position is attained, not during. Porter promotes creativity and innovation, but how many of the procedures outlined really advocate this with the use of a generic model. Analytical calculations are probably completed and business has moved on therefore taking advantage as a first mover would not occur in this school.

2.3.4 The Entrepreneurial School

2.3.4.1 The Basic Model

The entrepreneurial school sought to use leadership processes such as intuition, judgement, wisdom, experience and insight in order to develop adequate strategies. Strategy is still in the power of the leader and the organisation's behaviour becomes a result of the leaderships' vision, the environment can be considered as the field within which the organisation is manoeuvred. The core of this model is the concept of vision, which exists as an image rather than a detailed analytical plan. This creates a system that is flexible to enable the leader to adapt to known experiences. It suggests that

entrepreneurial strategy is both deliberate and emergent: deliberate in its broad lines and sense of direction, emergent in its details so that these can be adapted *en route*.

2.3.4.2 Weaknesses and Failures of this Approach

- *Strategy in the mind of the Leader as perspective:* This approach yet again places the faith of the organisation in the ability of one person to lead and manage the organisation. As in the design school, the concern of one person's ability to rationalise and evaluate the possible outcomes is an obvious limit. This, as pointed out earlier is limited by the leader's process of abstraction, hence making the process significantly subjective. Stacey(1992) has also pointed out that when a future is unknowable advice in the form of vision can not be concrete. The ability to shift one's worldview becomes increasingly important in the case of strategy based on perspective. Other premises of this school of strategy are also open to the same critique. The process of strategy formation is rooted in experience and intuition, promotion of the vision single-mindedly and maintaining close personal control of implementation. The process of strategy making is in the cognitive 'black box' of the leader and not much can therefore be said about the process. The strategy of the organisation is tied into the behaviour of the leader. The leader's style cannot be appropriate to all contexts nor to all persons within that organisation. In such a case appropriate action today might not necessarily remain an appropriate intervention in the future due to changing context. In this school strategy is closely aligned to the vision of one person, which might shift the organisation into a pathological behaviour.

2.3.5 The Cognitive School

2.3.5.1 The Basic Model

The cognitive school has its basis, as its name suggests, in understanding the processes that occur in the mind of the manager or strategist. It is drawn from the field of cognitive psychology. Mintzberg,*et al.* (1998) suggest that this school is still an

evolving school of thought on strategy formation and the model is merely a review of its current works.

Strategy is a process, but it is also a process that occurs in the mind of the strategist primarily. This process is an abstraction from reality and as such perspectives emerge that are in the form of maps, concepts, metaphors that shape how people view the environment. These views of the environment, taken objectively, are distorted by filters before they are decoded by the cognitive maps, and, taken subjectively suggest that they are merely interpretations of a world that exists only in terms of how it is perceived. The seen world, in other words, can be modelled, it can be framed, and it can be constructed. As concepts, strategies are difficult to attain in the first place, considerably less than optimal when actually attained, and subsequently difficult to change when no longer viable.

2.3.5.2 Weaknesses and Failures of this Approach

Mintzberg, *et al.*(1998) have not covered the failure of this model in any great depth with this school of thought still in its development. In the author's evaluation of this approach a focus on cognitive approaches is significant, and has much to offer in our understanding of strategy formation. This school however does not explore the process of moving from the cognitive into practice. The emphasis is rather at a level of personalisation, and this does little to inform the process of constructing strategies that are successful in practice. Although reality is perceived, we require the perceived understanding to inform appropriate action.

2.3.6 The Learning School

2.3.6.1 The Basic Model

The cognitive made the transition from a prescriptive approach to strategy to an adaptive perspective. As defined earlier, strategy could be viewed as deliberate, in which case it has its basis in the first three schools, or it could be defined as a pattern in which case the focus of controlling the organisation in order to achieve intended outcomes shifts to

one which is emergent. This is the emphasis of the learning school of strategy. This school has its beliefs based on adaptation to intended outcomes as they emerge through new insights and understanding. The concept of emergent strategy opens exploration into strategic learning because it recognises the organisation's capacity to experiment.

A further dimension to strategy which the first three schools exclude is that all understanding originates from reflection and looking backward, hence learning is not possible without acting. This implies that the idea of formulating strategy first, then act it, is not a true reflection of the process. The thinking in strategy does not stop after acting, but well into the process as you reflect upon the action and the effects.

The learning school attempts to intertwine the process of formulation and implementation in their approach, as they believe the environment is complex and unpredictable, therefore strategy must take the process of learning over time and not a deliberate "control"approach. The success of this school is that the system is able to learn collectively with many potential strategists in the organisation. Learning proceeds in an emergent fashion, through behaviour that stimulates thinking retrospectively, so that sense can be made of action (Mintzberg,et al. ,1998). Once several initiatives emerge and converge into a pattern we have an emergent strategy. These emergent strategies appear only in patterns upon reflection and hence plans can be made for the future based on these past patterns. Strategic management becomes about relationships between thought and action, control and learning, stability and change.

Learning as Knowledge Creation: Nonaka and Takeuchi (1995) argue that the managers in Western society:

'...need to get out of the old mode of thinking that knowledge can be acquired, taught, and trained through manuals, books, or lectures. Instead, they need to pay more attention to the less formal and systematic side of knowledge and start focusing on highly subjective insights, intuitions, and hunches that are gained through the use of metaphors, pictures, or experiences'.

Learning is a process of change at the individual level and is part of the process of change within the organisation as the individual is embedded within the organisation.

The dynamics of Organisational Capabilities: This approach promoted by Hamel and Prahalad(1994) suggest that strategy depends on learning, and learning depends on capabilities. This school of thought, although incorporating the design school by looking at the distinctive competencies, uses the learning approach by leveraging competencies uniquely and in way that make it difficult for competitors to imitate. The dynamic capabilities approach is a hybrid, principally of the design and learning schools – *'a contemporary view of adaptive strategy as a process of conceptual design'.*

Beyond Learning to Chaos: Theorists such as Stacey (1992) argue that disorder and chaos are intrinsic rather than alien properties of organisations. Stacey argues that 'long-term futures are not knowable' and 'the environment is not a given', which requires that 'the successful business adapts' to variable conditions. Chaos theory suggests that anything can happen, that irregularity is a fundamental property of the organisation.

2.3.6.2 Weaknesses and Failures of this Approach

- *No strategy:* In crisis, patient learning cannot be applied and the organisation may require decisive decisions in order to save the situation. It is also problematic to have a situation where a company may have thousands of opportunities bubbling and yet have no coherence due to absence of strategy. Another case where no strategy is fatal is in the case of having to choose from many different options and no means of evaluation of options.
- *Lost Strategy:* It is also a possibility that an overemphasis on learning can work to undermine a coherent and perfectly viable strategy. People continuously learn and start up new initiatives simply because it is new and interesting while no discipline exists. Learning should occur in an effort to improve the current strategic perspective and change when necessary, not remain in a state of constant change.
- *Wrong Strategy:* The unlearning of good strategies and an incremental learning of emergent strategies can also encourage the development of positions that no

one ever wanted, let alone intended. The organisation is lured one step at a time into an undesirable position.

- *Careful of Learning:* Learning seems to be about trying the little experiments, so we have to be careful about learning. As you fail, you keep reinvesting in the hope of recouping your losses, not recognising that the situation may be hopeless. And most of all learning is expensive and time consuming when resources are critical to the functioning of the organisation.

2.3.7 The Power School

2.3.7.1 The Basic Model

The power school brings to strategy a more inclusive approach about daily reality that is strategy process as an overt process of influence emphasising the use of power and politics to negotiate strategies favourable to particular interests. Mintzberg, *et al.* (1998) define power in the context of their argument to mean influence beyond the purely economic (which includes economic power used beyond conventional, marketplace competition), this brings it closer to politics, a term used loosely in this model.

- Strategy formation is shaped by power and politics, whether as a process inside the organisation or as behaviour of the organisation itself in its external environment.
- The strategies that may result from such a process tend to be emergent, and take the form of positions and ploys rather than perspectives.
- Micro power sees strategy making as the interplay, through persuasion, bargaining, and sometimes direct confrontation, in the form of political games, among parochial interests and shifting coalitions, with non dominant positions for any significant period of time
- Macro power sees the organisation as promoting its own welfare by controlling or cooperating with other organisations, through the use of strategic manoeuvring as well as collective strategies in various kinds of networks and alliances.

2.3.7.2 Weaknesses and Failures of this Approach

The concentration on divisiveness and fractioning within the power school may miss patterns that do form, even in rather conflicting situations. Moreover, political dimensions have a tendency to waste a great deal of time and distort information in the organisation.

Political agendas usually seem to be focused around ensuring personal agendas are met rather than organisational. Politics is a factor limiting strategic change and maintaining the status quo.

2.3.8 The Cultural School

2.3.8.1 The Basic Model

Culture is the essence of the bond between people in the organisation, the social force of the organisation. Culture is essentially composed of interpretations of a world and the activities and artefacts that reflect these; there are no private cultures, implying that its significance is collective (Mintzberg, *et al.*, 1998). Culture in organisational terms then becomes our shared understanding, common beliefs, and our products. The deeper the belief systems of the organisation, the more difficult it becomes to understand it from an outside perspective.

Ideology is used to describe a rich culture in an organisation- a strong set of beliefs, shared passionately by its members, that distinguishes this organisation from others (Mintzberg, *et al.*1998).

From a strategy point of view, strategy formation becomes a process of social interaction, based on the beliefs and understandings shared by the members of an organisation. The organisation passed this on to an individual through a process of acculturation, or socialisation, which is tacit and nonverbal. This means that an organisation can only in part describe the beliefs that underpin their culture, while its origins may remain obscure. Strategy takes the form of perspective above all, and is

based on the collective intentions, not necessarily explicated. Strategy hence becomes a deliberate process although the organisation is not conscious of it all the time.

2.3.8.2 Weaknesses and Failures of this Approach

- Culture, and especially ideology, do not encourage strategic change so much as the promotion of existing strategy. Culture becomes highly influential over the thinking in the organisation. With ideology usually being deeply embedded within the organisation, unlearning/learning is made difficult.
- Culture acts as a filter on information perceived by the decision maker, hence two organisations with different cultures would see the environment differently. Although this can be used to the advantage of the organisation, it creates the organisation "blind spot" in unpredictable and volatile environments. Culture is not at all times part of the conscious process of the organisation, hence at times the assumptions influencing the decision making process might not be known.
- Culture clashes becomes a pivotal problem in mergers, acquisitions and joint ventures.
- Culture, although resistant to change, is remarkably easy to destroy.
- Culture is also too heavily focused on the internal issues of the organisation

2.3.9   The Environmental School

2.3.9.1 The Basic Model

By simple reference, we understand that the environmental school considers the environment as the actor of influence. The position school considers environment as a set of economic forces- representing industry, competition and market. Environment at best in this school has also been vaguely described referred to as something 'out there'- all that is not organisation (Mintzberg,*et al.*,1998). The environment is a set of abstract dimensions – not a technological breakthrough, but dynamic.

This school premises what it defines as a niche – the very essence of competition, where an organisation competes with entities like itself. Niche is to environmental schools what market is the positioning school.

In this school the environment is a set of general forces that the organisation works within and is the central actor in the strategy making process. The organisation must respond to the environment or be selected out. The organisation is a passive element that must read the environment appropriately in order to adapt. Organisational evolution is a process whereby common organisations cluster together in a niche and compete for resources until they become scarce or conditions become to hostile.

2.3.9.2 Weaknesses and Failures of this Approach

- This school of thought assumes a contingency approach and looks at the environment in an abstract and highly aggregated form that make it vague. Strategy is more about relationships and specific positions you hold with regard to those relationships. Such a perspective is similar to network theory and a systems perspective of attempting to understand relationships at a fundamental level

- The primary argument of population ecologists is that the environments acts upon the organisation, with organisations themselves having very little influence upon the choices they make in order to survive. This cannot be a valid argument as large organisations often merge to reduce selection pressures.

2.3.10 The Configuration School

2.3.10.1 The Basic Model

The message of this school is that each school has its own time, in its own place. This school offers the choice of integrating all other schools. There are two arguments to this school, one describes the states-of the organisation and its surrounding context-as configurations. The other describes the strategy-making process as transformation. Transformation is an inevitable consequence of configuration (if an organisation

attempts to adopt another state-transformation, strategy is the process of moving from one state to the other).

In most cases, an organisation can be described in terms of a stable configuration of its characteristics: for a distinguishable period of time, it adopts a particular form of structure matched to a particular type of context which causes it to engage in particular behaviours that give rise to a particular set of strategies. Periods of stability are interrupted occasionally by a process of transformation. Life cycles could be described as being the patterning nature of periods of transformation. The key to strategic management therefore is to sustain stability, or at least adaptable, strategic change, but to also recognise the need for transformation and be able to manage that change process without destroying the organisation.

2.3.10.2 Weaknesses and Failures of this Approach

- Donaldson (1996) argues that configurations represent a flawed approach to theorising precisely because they are so easy to understand and teach:

  "*Few real organisations are simple structures or machine bureaucracies, almost all organisations lie somewhere in the middle. Students, be they MBA or executives, mostly come from organisations which have intermediary levels of size, standardization, organicness and so on. Managers are involved in managing change, usually of degree: some growth in size, a little more innovation, maturing of this product line but not that product line and so on.*" Each configuration school has problems, for example multidivisional firms may have units with different structures which pursue different strategies. Other criticism by Donaldson was that organisations change incrementally and to assume that there is a quantum leap of change is highly unlikely. Furthermore to suggest that organisations only reach a strategy once they successfully achieve a point of configuration from one state to another begs the question of how they manage to achieve these different states. The configuration school should not let us forget the complexity of the world.

2.4   Concluding remarks

One of the purposes of this dissertation is to propose a framework for synthesising the lessons and assumptions of the ten schools of strategy. The above summary, in presenting an overview of strategic models, has provided a series of "snap-shots" of the strategic problematic.

In essence, and arising from the foregoing, strategy can be described as understanding the allocation of resources and the anticipation of the dynamic interaction of the organisation in symbiotic relationship with its environment. Framing concepts, such as market analysis, econometric modelling and forecasting suggest that the fundamental dynamics between environment and organisation must be understood. However, it is probably correct to say that these frameworks do not contemplate, nor incorporate an understanding of, the fundamental structures that underpin behaviour of the system.

The schools described above partly cover some of the concerns in this regard. None, however, are complete in themselves. The specific dilemma is that the adoption of the approach of any one school is limiting, not only in terms of understanding the strategic problem but also in terms of the ability to appropriately combine different approaches.

The framework necessary to lend understanding to the strategic problem begins with seeing the organisation as being embedded within the environment and in constant interaction with it. This, in essence, constitutes a systemic approach, a form of which will be the subject of Chapter 4, where it is argued that the system should be analysed as a coherent whole. This type of constant interaction between organisation and environment requires that managers see as much of the whole system as possible in order to better inform their strategic decision making process.

Before proceeding to explore systems and their implications for strategy, it is useful to consider the role of organisational design as the context within which strategic decision making occurs.

CHAPTER THREE

ORGANISATIONAL DESIGN

3.1.   A Systemic Framework for Organisational Design

The previous sections of this dissertation imply a trend in strategic planning which suggests that the following assumptions are gaining credibility:

- Ability to plan effectively is becoming less easy
- Historical data as a basis for planning is not necessarily legitimate
- Relationships between relevant variables are often non-linear and these non-linear relationships create chaotic behaviour
- We cannot rely solely on existing competencies to deal with future uncertainty
- While it is possible to influence the environment, it cannot be completely controlled
- The scale and nature of random shocks and major discontinuities serve to paralyse organisational decision-making processes
- Understanding environmental change, based on industry structure, does not tell the complete story about the future
- Long-term futures are unpredictable, therefore organisations should be adaptive and creative
- Organisations and economies should not create detail plans for long-term futures but encourage entrepreneurship and self-innovation

Current thinkers in the field of strategy have gone as far as to make the following radical statements:

"In a non-linear world, only non-linear ideas will create new wealth. Most companies long ago reached the point of diminishing returns in their incremental improvement programs." (Hamel 2000)

"The nature of change is inevitable, yet unpredictable, and it has a material impact on business," suggests Michael Raynor, a director of Deloitte Research in Toronto. Research at Deloitte Consulting is also suggesting that analysts almost always get it wrong. (Business Day, 2002)

It therefore appears that it is an accepted position that organisations operate in a far more complex and less predictable environment than was previously the case. The position of organisations, as elaborated in terms of the external and internal elements, indicates that the current models of practice in strategy are not adequate. However, this has not lead to a significant shift of our conceptual models, and tools in the organisational decision-making process have not changed much. Further, most strategy processes do not recognise the integral nature of behavioural dynamics.

These assumptions underpin the nature of relationship between organisation and environment. Below is a basic illustration of the processes of strategy. It is suggested that this illustration depicts the current mode in use in the majority of the organisations in one form or another. Approaches to strategic work based on a set of primary beliefs or assumptions that managers hold about strategy are also reflected in the figure below.

3.2. Processes of Strategy

Strategy theories appear to be divided into schools of strategy, classical types of strategy – classical approach, processual approach, evolutionary, systemic- and perhaps even at times an offer of another approach to strategy. An attempt has been made to combine the current thinking of strategy into processes. Most strategy approaches fall into any one of the processes that have been mapped. Organisations, dependant on their 'mind-set', will tend to favour one over the other, but do not posses the time or the resources to perform all of the processes indicated below (see Figure 3.1)

Assuming these are all the current processes of strategy, and that all organisation perform all of the above processes, it is still uncertain as to the level of success these

approaches will achieve. Strategy literature in general has covered a preferred model for planning and the organisational design that will suite that particular type of planning model. Although many of the concepts that have been discussed are relevant in developing a new planning model, it is inadequate in developing approaches to deal with current reality. Most models are applied to practice, instead of practice forming the basis of a new model.
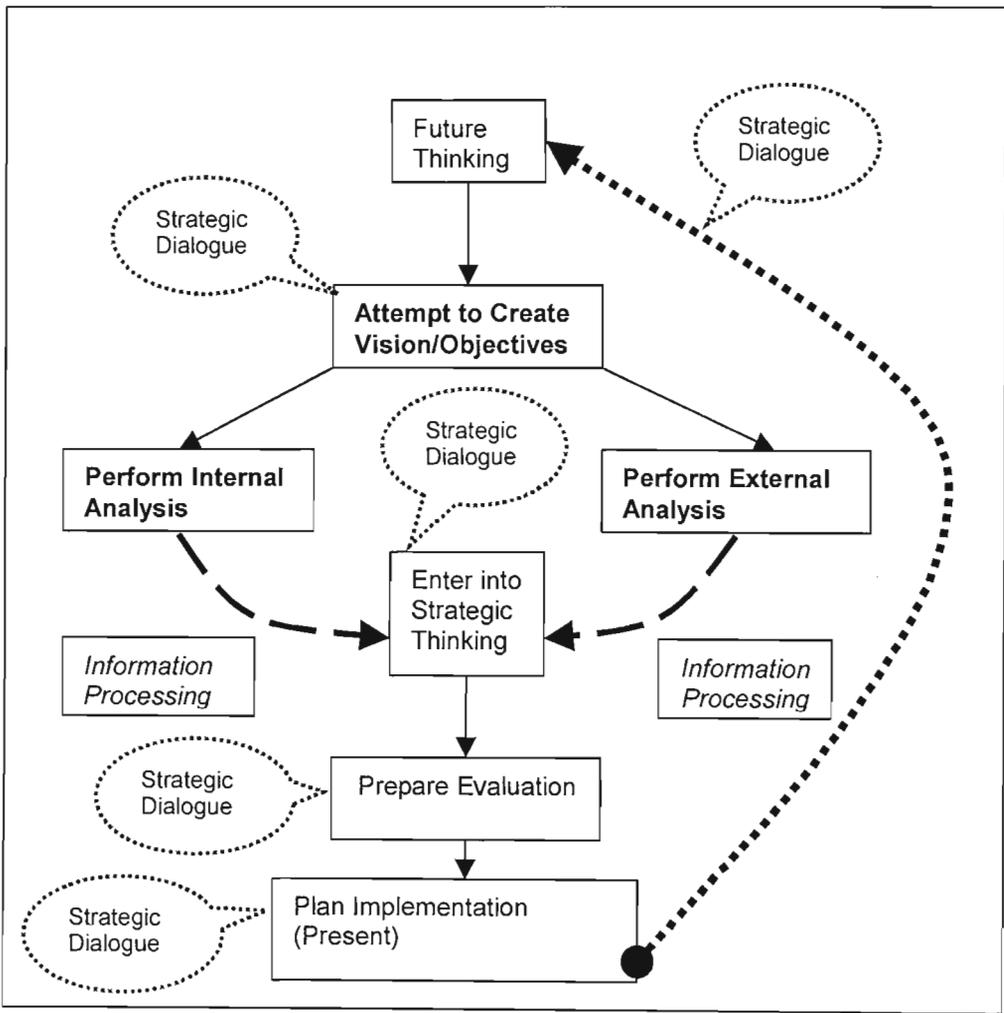
Figure 3.1 A Diagrammatic representation of the processes of strategy

Strategy and strategic thinking lie largely in the realm of thinking about the future, in terms of the vision for the organisation. The future is definable as objectives that the

organisation is required to achieve. Knowing that this future is obtainable, organisations engage in two focal processes. That is analysis of the external market to determine externally influencing factors, and analysis of the internal organisation competencies and resources available in order to meet the demands of objectives. Mintzberg (1994) suggests that this is still one of the key ways in which the strategy making process is attacked.

Tools and methodologies that are used in the external analysis of the environment are:

- Forecasting
- Analysis of industry structure
- Risk analysis
- Porters five competitive forces
- Scenarios of the future
- SWOT – Opportunities and Threats

Tools and methodologies that are used in the internal analysis of the organisation are :

- Skills Audits
- Competency audits
- Resource audits
- SWOT – Strengths and Weaknesses
- Organisational Development
- Training and Learning
- Scenario – strategic conversations

The process labelled "strategic thinking" in the flow diagram above is the critical process of sense making or synthesis of information from the external and internal analysis process. The process of bringing together information to produce a synthesised picture is also akin to the processes of knowledge management. The analysis process, both external and internal, are merely data generating to provide key insights into the strategic thinking stage where data/information is turned into supposedly unique knowledge for the organisation.

Developing a further perspective to the traditional approach to strategic planning, Liedtka(1998) has defined five specific component elements of strategic thinking as:

- **A Systems perspective:** Systems thinkers work from the basis that managers have mental models of the world. These mental models influence the manager's perception of the organisational behaviour. Systems thinkers also work from the platform that the organisation is part of a greater context, which continually influences the inner systems of the organisation. This relationship between organisation and context is a mutually reinforcing one; hence systems perspectives focus on relationships to ensure a system that is greater than the sum of its parts. System thinkers attempt to influence organisational behaviour through horizontal relationships, that is interdepartmental, and vertical relationships, that is between business environment, organisational level, and the operational level.

- **Intent Focus:** Hamel and Prahalad (1994) suggested the term "strategic intent" to mean a competitive position that the organisation holds that is unique from its competitors, and point of departure from the current organisational position. This process is described as stretch and leverage of resources.

- **Intelligent Opportunism:** This is a concept based on the principle that strategy is not always planned and is emergent in its nature. Mintzburg clarifies this as being the difference between deliberate strategy and emergent strategy.

- **Thinking in Time:** Strategy is about the future we intend to create, but it is also recognising that the way forward is also about a departure from the past. The past has predictive power, and Hamel and Prahalad (1984) describe the future as the gap between reality and intent. When we think strategy in time, we think about the relationships between past, present and future. Handy (1994), stated that:

"having seen the future we want to create, what must we keep from the past, lose from the past, and create in our present, to get there."

- **Hypothesis-Driven:** "Hypothesis generation poses the creative question: "What if?", while hypothesis testing poses the critical question: "If then?". Strategy is about being both creative and analytical. Moving between paradoxes is accomplishing hypothesis-driven processes. The paradoxes are intuition and analysis, divergent and convergent processes, planning and strategic intent. The effect of hypothesis-driven strategy, which is not much unlike scenarios, is that the organisation is able to pose a variety of hypotheses, shifting the organisational thinking from simple cause and effect approaches.

Strategic thinking as a process then can be seen as the combination of all five processes. The end result of a strategic process is the intellectual property of the organisation. What knowledge management would term the unique knowledge of the organisation which places it in a market position that competitors find difficult to imitate, that provide the added value to the customer, and that creates a learning and changing organisation.

System thinkers suggest these knowledge processes work systemically within the formal structure of the organisation as shown below in Figure 3.2. The business environment in systems thinking language is termed the supra-system. The organisation is the system and then the sub-systems are the various parts that comprise the entire organisation. For example finance department, human resource department, the project manager and administrators. The holon allows us to perceive relationships and their effect in more than one dimension, that is cause and effect. Simply put, the above diagram displays a process whereby internal sub-systems together provide the knowledge that makes up the organisation, the organisation then in turn effects a change out in industry or the organisational environment. That change is then perceived by the different sub-systems inside the organisation. Sub-systems are able to absorb, and synthesise this feedback from the environment, learn and adapt.
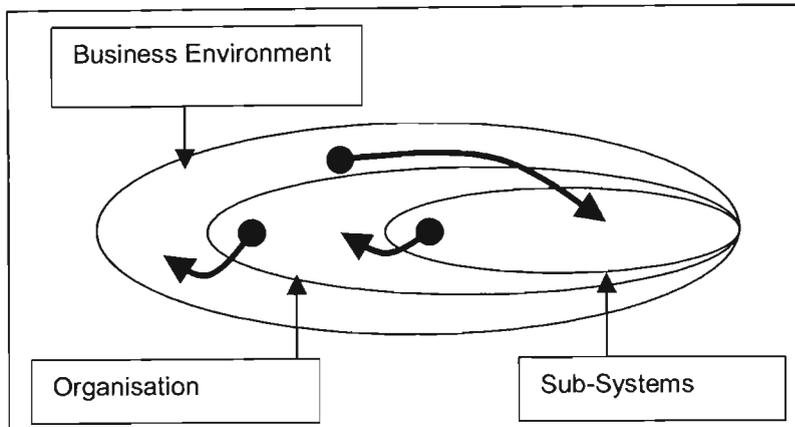
Figure 3.2 The "holon" representing the hierarchy of a system

Knowledge management attempts to formalise this process so that greater learning is captured and added to the knowledge base of the organisation. In many organisations such processes are haphazard and are at times completely missed.

The organisational decision-making process, which is considered as the rationalising and analytical process of strategy, occurs after the broad vision has been outlined. This is the evaluation process where the decision makers of the organisation decide on a particular 'global' strategy to follow. This strategy is turned into a plan, more commonly known as the strategic plan that is strategic planning. It is the outlining of a series of interrelated steps that are 'actioned' in order to achieve the organisation's future intent.

The paradox encountered is the divergent process of strategy-making and the convergent process of the decision-making. Theorists suggest that it might be impossible to have strategic planning and strategic making under the same process of strategy as they are inherently contradictory of one another. Leidtka (1998) suggests that both are required simultaneously and the difficulty lies in working at two levels on the ladder of abstraction. That is moving from a conceptual level to a level of detail. The conceptual level is double loop and at detailed levels, such as programming and scheduling in the planning process is single loop learning. Argyris (1994), in his explanation of improving organisational efficiency, suggested that double-loop learning is

an essential part of the planning process, and simply revising a plan on single loop learning is not closing the gap between reality and the plan. To explain, double loop learning is the act of questioning the assumptions upon which planning is premised, whereas single loop learning fails to question those assumptions. In the context of planning, moving from a plan to a conceptual model requires double loop learning and not single loop learning. The paradox is created as a result of not applying the appropriate process to resolving the strategy problem. The problem is that the majority of the strategy processes begin with the level of planning in the hope of creating a concept of the future. When strategy fails we tend to address the problem through processes akin to single loop learning.

Strategic thinking creates a gap in the minds of managers between today's reality and a more desirable future, strategic intent. Translating the desirable future into organisational action necessitates strategic programming, ie realignment of structures, systems, processes, and skill around the new intent in a way that begins to close the gap that strategic thinking opened. Once closed a new gap is opened in an iterative and ongoing cycle of strategic thinking and strategic programming as shown in the illustration below in Figure 3.3.
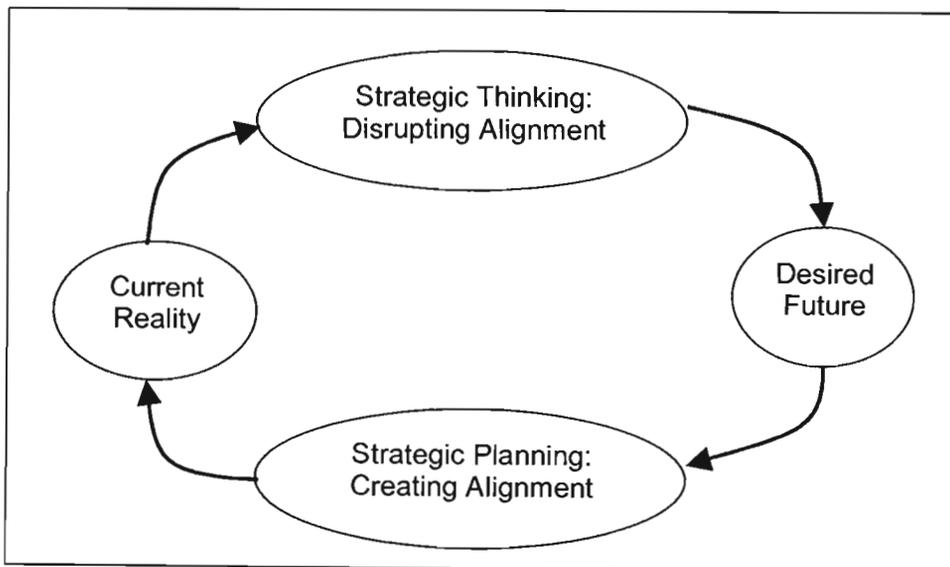

Figure 3.3 Linking Strategic Thinking with Strategic Planning: Adapted from Liedtka(1998)

Many of the planning models developed for strategy purposes fail to adequately bring into the process the relationship between strategy and organisational structure. Although some, such as Porter (1994) have elaborated on the role of structure, his discussion revolves more around industry and market structure rather than the relationship between strategy and organisational structure. To effectively address the issue of strategy, one needs to reflect on the structural form of organisations within a specific planning environment. A preferred perspective is one whereby strategy is also seen as a process of defining relationships between the organisation and its environment and within the organisation.

The summary of the schools of strategy, and the processes of strategy do not conclusively show that any one approach combines organisational structure, processes and environment with the process of strategy.

3.3. Organisational Development

To clarify the position on structure, it is necessary to understand the role structure has played in the development of the modern organisation.

3.3.1 The Role of Structure

Ackoff (1999) suggested that the world is undergoing a fundamental change in worldview. By his argument the world is moving away from the mechanistic view of the world to one that is holistic.

Although the move towards holism represents, in itself, a major development in organisational thinking, the phenomenon has been made yet more complex by the following further factors:

- *Globalisation* - the integration of world economies,

- *Technological advancement*- technologies that replicate processes and thereby alter the nature of value-adding processes and organisation of work,
- *Knowledge*- the key stimulus in the economic growth engine

The recent period in organisational development has seen all three of the above changes occurring simultaneously. The very occurrence being simultaneous has possibly led to a fundamental challenge to the paradigms of the organisational world. Adam Smith in his seminal work about the division of labour could not have conceived of a time when both space and time are altered for a more efficient form of organising "work" and the primary driver of economic growth would be knowledge rather than capital. It is perhaps why organisations themselves are poised at the brink of realising one of the most efficient forms of organisation, viz. 'the network'.

Burns and Stalker (1961) argued for a more organic form of organisation to suite times of great uncertainty and volatility. More recently, Nohria and Eccles (1992) explain the impact of technology on current organisational forms and hence the rise in popularity of the network form in current organisational thinking:

- Technology reduces time and people required to process information vertically and horizontally in the organisation. This reduces the levels of hierarchy and improves a manager's span of control.
- The control and flow of information within an organisation is facilitated through technologies such as e-mail, the Internet and video conferencing. Organisational boundaries that are controlled and reinforced by the flow of information through existing structures are deconstructed as the medium of information transfer opens the access to information. Previously the flows of information could only be passed along certain channels which where controlled by 'gatekeepers'.
- The organisational boundaries can be defined by the nature of relationships between organisations. Customers can become suppliers, and suppliers can become part of the organisation. The improvements in inter-organisational information flows have resulted in the relationships between organisations becoming more fluid. This has allowed for organisations to change the very nature of their organisational forms, by redefining their relationships. The

boundaries by which organisations define themselves are blurred with the nature of relationships between organisations constantly changing and hence the structural form of the organisation evolving. The evolution is integrally dependant upon the nature of the relationship between organisation and environment.

- The flexibility of the organisation is enhanced through the manoeuvrability technology allows employees, eg. laptops, relational data bases, ICT systems, remote access system, expert systems that can capture information, Internet, email, and the emergence of the 'knowledge worker'. New methodologies-prototyping systems and systems theory approaches, allow for designing and easier redesigning of control systems, which facilitate structural change.

- The cost of transactions that is the searching, coordinating and monitoring that people and organisations engage in when they exchange goods, services, or ideas (Butler, *et al.*, 1997), are decreasing as a result of technology that has affected the organisation of work.

This addresses the changing nature of organisational structure in response to environment. What is evident, though, is that the relationship between organisation and environment plays a fundamental role when one is attempting to resolve the issue of effective strategy making and implementation. Effective strategy cannot be developed without adequately understanding the system within which intervention occurs, nor ignore the complexity of the system when you attempt to change its form.

Hamel (2000) argues from the perspective that every business requires a unique set of relationships between its different component parts and that together they form the organisational business model. Without a business model the organisation neither places itself in a unique competitive position nor will derive new profit streams. Hamel (2000) defines the business model as having four component parts:

- Core Strategy
- Strategic Resources
- Customer Interface
- Value Network

Each of these component parts can be further detailed, for example value network is composed of:

- Suppliers
- Partners
- Coalition

One of the critical elements to Hamel's (2000) approach to developing the correct business model is the relationship between these four components. He defines these relationships as bridges. The bridge between core strategy and strategic resources is *configuration*. This refers to the manner whereby competencies, assets, and processes are combined and interrelated to support particular strategies. The bridge between customer interface and core strategy is *customer benefits*. This refers to how customer needs relate to core strategy. Finally, the bridge between value networks and strategic resources is *company boundaries*. This is the decision making process relative to what the organisation will do itself and what is outsourced. Hamel recognised that in a world where strategy has emergent qualities and an environment that is unpredictable, the organisation requires flexibility and adaptability to reconfigure itself in order suite the context or innovate to lead the industry. Any of the bridges reconfigured changes the size, the structure and the processes of the organisation quite radically. The organisation itself shifts from one structural state to another by simply changing the bridges.

A key bridge in defining the structure and size of the organisation is the company boundary. Hamel (2000) does invariably imply that the nature of the organisation and even what the organisation considered its business can alter simply by redefining the boundary of the organisation. Hamel prescribes a process that organisations could follow in order to define their boundary. From a systemic perspective and at a fundamental level, in defining the boundary of the organisation is also the organisation defining the boundary of the industry, who are organisations competitors, suppliers, customers or partners. In other words defining the size, structure and the business of the organisation is also about defining how the organisation percieves the industry.

In the diagram below in Figure 3., the black arrows are intended to depict interactions between parts of the organisation and between it and other organisations. The red arrows are intended to depict the fluid boundaries between the organisation and its environment as well as the shifting relationships between the organisations within the industry environment. In an industry that is stable the regulations, competitors, suppliers and structure are well established. The business of the organisation is also usually well defined. When industries become volatile and unpredictable, defining "what is the nature of the industry?" is as much part of defining the business of the organisation, the type and size. The organisation, by deciding to shift focus through outsourcing various functions, can redefine its core business. Today the business is production of boxes, tomorrow it is packaging, today it's a customer and tomorrow it's a supplier.
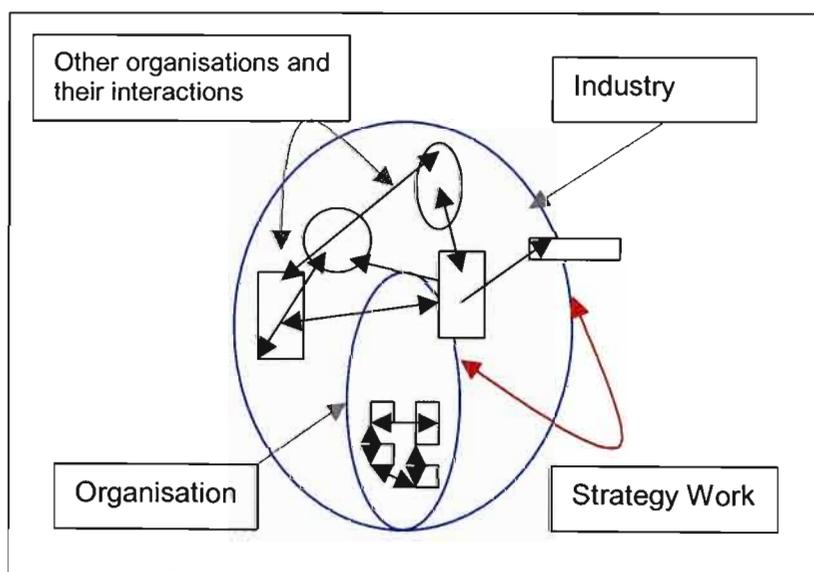
Figure 3.4 A Diagrammatic Representation of a System indicating the relational network of organisations/stakeholders

The decision of what constitutes the organisation is a fundamental decision in industries that are volatile and unstable. This is clearly demonstrated when businesses that create new industries are used as the industry benchmark and are also instrumental in developing industry regulations and structures. Defining the

organisational boundaries in such contexts is inextricably linked to defining the organisation's position in relation to the structure of the industry.

3.4 Critical Size

If the concern in strategy in unpredictable and uncertain environments is also about structure and size, then another key argument is one about the idea of "critical size".

Burns and Stalker (1961) argue for a more organic form of organisation so as to create adaptability and flexibility in organisations. These characteristics have also been defined by Hamel as capacity for innovation. Perhaps a fundamental principle for designing such organisations is about achieving effective synergies between the parts and hence there is good possibility that, beyond a particular size, relationships fail to maintain an adequate flow of information.

There are two parts to the size argument that I would like to pursue, one is the number of relationships a person is able to maintain, and two the optimum size of groups, that is the number of people. Gladwell (2000) highlights the following:

- Channel Capacity, referring to the amount of space in our brains for certain kinds of information. There seems to be a natural number, six or seven which indicates the limit to the human capacity to process raw information. This is supposedly the reasoning behind seven digit telephone numbers.
- Social Channel Capacity, refers to the natural limit to the size of social groups. Humans are the only group of all primates to possess the ability to socialise in large groups. Dunbar(1992), a British Anthropologist, suggested that we have the largest brain and therefore can handle the complexities of large social group dynamics. Dunbar developed a concept (based on the size of our neocortex) that humans can constructively engage social groups roughly the size of 150 people. So as an individual, it is possible to manage roughly 150 relationships at a level deeper than simply knowing the person's name. Dunbar finds this number repeated in different types of organisations.

For example, the size military planners split their functional fighting units into, and the religious group, the Hutterites, that keep their social colonies to a maximum of 150 people. Gore Associates, a multi-million dollar high-tech firm based in Newark, Delaware keep their plant size to 150 people and once it gets larger they separate. In all these above examples people have merely stumbled on the number of a 150 by trial and error in attempting to achieve the optimum size of a well functioning group.

These two principles have fundamental impacts on the way in which we view the organisation of work in the modern day organisation. Tracing the evolution of organisation and the modern economy it is noticeable that the preferred route for organisations has been "bigger is better". This is perhaps true if we remained in a world that changes very little, experienced a constant economic growth, mass produced products based on economies of scale, and could meet any of societies demands using the production line.

The fundamental change that technology has brought to modern organisation is an enhanced ability to optimise performance, which also places particular dynamics on the organisation. One of the key processes that drive the modern economy is our reliance on knowledge. As demonstrated above, in Figure 3.4, various organisations/stakeholders interact with one another. This interaction is formally and informally part of knowledge generation. Therefore knowledge generation is not a process that can be engineered and mass-produced. It requires people, relationships between people, synthesis of information and the combination of process with technology. All of these qualities place an inherent restriction on size of organisation and processing capacity of the human intellect based on individual and social channel capacity.

3.5   The Network Form of Organisation

Moving beyond the human channel capacity, there is a social channel capacity that organisations must also recognise. Globalisation, technological advance and knowledge generation fundamentally change the mechanics of organisations. These

changes have brought with them the restriction of social channel capacity that organisations need to accept. These changes have caused a primary shift in our view of management of organisations to that of a complex set of processes that cannot be accurately mapped, organised and replicated. It is the relationships that are key in the management of the modern day organisation and not the functioning of the parts. This, combined with a shift toward a flexible and adaptable model, highlights the importance of recognising the restriction social channel capacity places on the size and structure of the organisation.

Organisations face the challenge of creating a balance between innovation and knowledge creation. An organisation with decentralised decision making and organisational processes is able to innovate as team and departments are responsible for their own performance, but lack the ability to effectively transfer information around the organisation in order to drive knowledge creation. On the other hand, centralising functions to expedite information transfer and create a centre for information storage risk strangling the autonomy within the organisation thereby stifling freedom to innovate. The balance organisations are striving for is not based on an either/or situation but a design problem (Day and Wendler, 1998). Although process is central to the concern, process without organisational design will result in little change within the organisation.

In fact the critical question organisations are seeking to answer is not "how do we achieve balance?" but rather "what is a better form of design?" Organisations seek to optimise structure, however we have forgotten to consider a characteristic that is intrinsic to the formal organisation and has genuine insights for redesigning. That is the network perspective of organisation. It must also be clarified that networks exists whether we choose to define it or we find a need to use it to lay claim to a miracle organisational form or is seen as the midpoint on the continuum between hierarchies and markets.

Nohoria (1992) suggests that there are five premises that underpin a network perspective of organisation:

1. *All organisations in their important aspects are social networks and need to be addressed and analysed as such:* Social networks are been defined as a set

of nodes (persons, organisations, etc), linked by a set of social relationships (friendships, transfer of funds, overlapping membership). These relationships are a pattern of reoccurring linkages that are found at any level, horizontal or vertical, which are either prescribed or emergent. This quality defines any form of organisation- industries, economies, firms- at a fundamental level, and to say it is not a network essentially implies it does not consist of any relationships. Organisations as a structure must therefore be analysed in terms of multiple networks of relationships and their patterning, both singly and in various combinations.

2. *An organisation's environment is a network of other organisations:* The idea of environment in organisational theory has not been developed further than to consider it as an influencing factor in the design of the organisation. Economists have defined the environment into structural models by causal relationships. Porter(1996) provided a conceptual framework that helped organisational theorists deal with environment more conclusively than causal models. Porter's model was also structurally-based and divided the environment into suppliers, competitors and customers. This, as Nohoria(1992) suggests, leaves environmental concerns as a topic about uncertainty or resource scarcity in relation to the organisation. It has also tended to be vague about the source of the pressures on the organisation. It is critical to understand the relationships between and among other organisations and not simply the identification of the other organisations. Barley, Freeman and Hybels (in Nohoria and Eccles, 1992) stated:

"Not only are organisations suspended in multiple, complex, and overlapping webs of relationships, the webs are likely to exhibit structural patterns that are invisible from the standpoint of a single organisation caught in the tangle. To detect overarching structures, one has to rise above the individual firm and analyse the system as a whole."

The network form of organisation builds on Porter's concept of environment in that it gives far greater attention to the relationships between different organisations, thereby analysing the environment as a whole system with a

complex set of interrelationships. The network form attempts to understand the forces upon the organisation by analysing the pattern of relationships among organisations that make up the environment. However the emergent qualities of systems in this interpretation of a network must still be considered. As indicated above, in the interpretation of Hamel's work, organisations, through strategy, are constantly changing the nature of the relationships and hence the patterning as defined by Nohoria does not always remain the same. Networks, as Nohoria sees them, require an added dimension, that of emergent behaviour and although it provides an added dimension to Porter's work and causal macro models, it must also be accepted that network relationships are part of the whole and therefore the analysis is far more complex than patterning relationships. Economists, organisational development and systems theorists have not synthesised their various knowledge basis to develop a more conclusive model for environment analysis that aids strategy. Each school has still remained within their strict rules for observing and analysing 'systems'.

3. *The actions (attitudes and behaviours) of actors in organisations can be best explained in terms of their positions in networks or relationships:* Essentially network analysis suggests that it is more important to understand an actor's position relative to others in various networks of relationships than knowing how they differ in their attributes.

4. *Networks constrain actions, and, in turn, are shaped by them:* Network analysis suggests that networks are stable and patterned in nature within organisations, and they do accept the fact that actors are always in exchange to create new relationships in order to maintain control. This always creates entire new sets of networks, hence networks are as much process as they are structure, continually being shaped and reshaped by the actions of actors who are constrained by the structural positions they are in and in turn shape the structure itself.

5. *The comparative analysis of organisations must account for their network characteristics:* The majority of the comparative studies capture generalised attributes about the relationships of the network. Generalisations do not capture the essence and meaning of the relationship itself. A network analysis essentially examines the actual variables and measures, which reflect the overall structure of relationships within the organisation.

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It has been stated in several publications that organisational structure needs to be related to the environment in order to survive. *"Network (or organic) structures are better suited to complex, rapidly changing, and turbulent environments than hierarchical (or mechanistic) structures, which do better in stable, simple, routine environments"* (Burns and Stalker 1961; Mintzberg 1979; Miles and Snow 1986; in Nohoria and Eccles 1992). The forms of structure are mixtures between hierarchy or market forms. The point of such discourse is missed if one focuses on an organisational form and does not see the context in which the form is relevant. Hierarchy as a form was derived from a mechanistic worldview. The market form was a response to the inability of hierarchies to respond to, and effectively process, information.

The foregoing indicates that the nature of the contemporary organisational context would lend itself to systemic approaches. Chapter 4 explores a more detailed framework for the integration of such organisational design approaches with the earlier discussion of strategy (Chapter 2).

CHAPTER FOUR

A SYSTEMS APPROACH

4.1 Systems

The term system is broadly used to describe many 'forms of organisation' such as global systems, management systems and information technology systems. Although the term system is commonly used in a descriptive manner, a definition of a system is not commonly understood. Ackoff (1999) suggests that there are three primary types of systems:

- Deterministic: *"systems and models in which neither the parts nor the whole are purposeful"*
- Animated: *"systems and models in which the whole is purposeful but the parts are not"*
- Social: *"systems and models in which both the parts and the whole are purposeful"*

Ackoff (1999) defines a system as "a set of two elements that satisfies the following three conditions:

1. The behaviour of each element has an effect on the behaviour of the whole
2. The behaviour of the element and their effects on the whole are interdependent.
3. However subgroups of the elements are formed, each has an effect on the behaviour of the whole and none has an independent effect on it"

He further elaborates, "A system, therefore, is a whole that cannot be divided into independent parts." Systems theorists have defined the critical characteristics of a system as being:

1. The parts have essential characteristics that the system may lose if separated from the system, and therefore can only be understood if they are taken in the context of the whole;

2. The system has essential characteristics that none of the parts individually possess, but are only present as a consequence of the interactions of the parts.

Many view systems as an alternative perspective, mediated by alternative "worldviews". A system is typically conceptualised as a complex web of relationships that are difficult to understand or define precisely. Modelling is suggested to help define and clarify the details of the mental or cognitive view (Forrester in Sterman and Morecroft, 1994). The modelling of a system so as to understand details in the strategy field is used in the Porter(1996) model and in econometric models. Although modelling improves our understanding and quickens learning, it tends to oversimplify the many dimensions of the strategy process. The complexities inherent in the business of strategy making, as previously identified, do not always lend themselves to modelling.

A systems approach is a shift away from traditional or classical models of strategy. Systems, as described by Ackoff (above) suggests an alternative approach to solving complex problems, including strategy. Traditional approaches to strategy, as an approach to answering the complex problems encountered by organisations, and how they interact with the environment has provided no new models for deeper insights. Theorists such as Mintzberg(1994) and Liedtka(1998) support the argument for a new approach to strategy.

4.2. A Systems Perspective

"This preoccupation of scientists in general is reflected among Management Scientists in particular for whom the systems approach to problems is fundamental and for whom organisations, a special type of system, are the principle subject of study" (Ackoff 1999)

Ackoff (1999) speaks of a system of systems concepts, where he attempts to consolidate a systems approach. He also applies a systems approach so as to understand another system. In understanding strategy, the organisation in relation to the environment is the fundamental systems that is analysed.

1. **Understanding the whole:** A system cannot be separated into parts as it loses its essential properties. The statement implies that in order to understand a system we

need to understand the functioning of the whole, as well as the parts. This suggests that the interactions between the parts are important in order to understand the behaviour of the systems. This also has implications for how we optimise the system. That is, any one part of the system cannot be optimised in isolation in order to thereby optimise the whole system.

2. **Systems are systemic:** Ackoff (1999) suggests that any element that does not produce a change in the state of the system and is not part of the system is not part of the environment. There are two types of systems:

   • a closed system, where the environment does not affect the system;
   • an open system, where the nature of the interaction is dynamic as described by Ackoff.

   The preferred system for a strategy model is an open system approach. An open systems approach describes the nature of relationships in systems as interactive, dynamic, and changing. That is, a change in any element of the system produces a change in the state of the system. The holon (see Figure 1.1) is a graphic representation of the relationship between the elements, that is sub-system, system and supra-system. It is further suggested that the relationships in a system are systemic as three levels (sub-system, system, supra-system) influence each other so that a change in one effects a change in another. This implies that effecting change in a system without a clear understanding of the nature of the relationships between the elements may not produce the intended outcome. The systemic nature of a system is not time dependant, that is short or long-term. Therefore, in the decision-making process, cognisance should be taken of the relationships and how they influence the different elements.

3. **Systems have patterned, but also emergent behaviour:** Systems theory suggests that control mechanisms in the form of feedback loops maintain the state of the system. Feedback loops also cause unexpected behaviour in the system. The system's behaviour is therefore bounded by feedback loops that can either maintain the system in its current state or cause a radical change in the state of the systems

behaviour. Systems gain their patterned nature through this design feature. When systems are resistant to change, it is as a result of feedback mechanisms. This systems approach is based on a cybernetic model. Ackoff's (1999) explanation of variety, states that the elements of the system each do different things and together they do something that neither can do alone. In other words, for a systems' elements to function as a whole and each do different functions, the system requires a process designed specifically at achieving the function of the elements but without compromising the whole system. In organisations, an example of variety increasing or decreasing activity is when attempting to perform more functions but holding the resource limits constant. At some point the system with its resource utilisation would reach a limit and the variety would need to be increased in order to deal with an increased output requirement. In essence, this means that systems (and particularly organisational systems) can have a patterning nature to their behaviour dependant on their design. The behaviour of the system is as a result of the interaction between the elements, as defined by the nature of the relationships. As a result of this characteristic of systems, there is an inherent ability of the system to have emergent qualities due to the dynamic relationship between the elements. This characteristic of systems could possibly alter the current state or function of the whole system if one of the relationships changes. These characteristics are important for organisational theorists because it suggests that there is an altering of the systems state that is not predictable or possibly controllable. There is one other element to emergent behaviour that is problematic for organisational theorists, that is systems exhibit chaotic behaviour, as they are sensitive to initial conditions.

4. **The Purposeful System:** The purposeful system becomes a critical part of the strategy approach to developing a systems methodology. A purposeful system has the ability to change its goals while selecting the manner in which to achieve the goals. A purposeful system also has an element of constantly seeking new goals once achieved and pursues its purposes. In the organisational context, such a system is a social system that embodies value judgements, evidenced by system outcomes. This has significant implications for the success or failure of the whole. In defining the boundaries of the system value judgement are exercised so as to either includes or excludes elements from environment. This defines not only the

system, but also the critical influences of the system. The relationship between the parts of the system are constructed to suite the specific purposes. The organisational system therefore, by construction, prioritises purposes and resources. The decision-making, based on the value judgement principle, described above, and the construction of a system in the organisational context are principles necessary to improve integration. The designing of an organisation that functions efficiently as a whole moves beyond principles of autonomy or centralisation to improve integration. A decision-making process that is value-based has implications for the organisational design and the strategy process.

5. **Evolutionary systems:** de Geus(1997) speaks of organisations that have one purpose, i.e. 'to survive'. Organisations have an inherent desire to survive over that of all other organisational goals/purposes. In the business organisation, the primary purpose espoused is profits, but in de Geus's study of organisations over the last several years, he has found that the number of organisations that have survived for longer than 50 years has been surprisingly small. The average life span of companies has been suggested to be 40-50 years and one third of Fortune 500 companies listed in 1970 had disappeared by 1980. Drawing on observations in the biological sciences, de Geus, amongst others, would consider that the capacity of the organisation to survive is correlated to its capacity to evolve into new forms over time. This implies an adjustment to the nature of the interactions within the organisational system and between the system and its environment. If a systems approach is considered, then a realistic assumption about understanding organisations is that they are a complex set of network relationships. These relationships have the ability to change (or evolve) as part of goal-seeking behaviour inherent in organisational models/systems.

The organisation strives for an ideal state (i.e. goal-seeking behaviour) by eliminating decision options and, in so doing, engages in the process of organisational learning towards that state. That is, there is a sequence in the behaviour of system towards a goal. Others such as Stacey (1992) would suggest that there are patterns of behaviour within the organisation, which do not necessarily follow a path of progression.

6. **Hierarchy and complexity in systems:** One of the fundamental principles of a systems approach is that the relationships connecting the different parts of the system are the primary focus of analysis. The following are the dimensions in systems:

- the concept of hierarchy;
- concepts associated with relational complexity.

Each will be explained separately but are inextricably related, in reality. According to Checkland (1993) hierarchy is a fundamental concept relative to systems thinking. This hierarchy is not one that is focused on power or politics, rather simple boundary definitions wherein we exercise our value judgements. Thus we can conceive of a system (the organisation) as consisting of sub-systems of component parts (departments or individuals) all of which are contained within a supra-system (the operating environment). This hierarchy is merely an ordering of the patterns and processes. The second type of hierarchy is associated with the levels of detail at which we are viewing the systems. A high-level systems model attempts to work at the level of the conceptual, while a low order system tends to function at a level of detail. Low-level systems are intended to work at a level of mechanics of the systems, that is the understanding of how the system works. At high levels of systems thinking we are attempting to understand "why" systems work in the manner they do. High levels of systems thinking focuses on the relationships between system, sub-system and supra-system. Systems approaches usually do not attempt to shift out of this model of application (supra, system, sub-system), however the scope of a systems approach has not fully been explored. The relationships can simply be altered by a new element entering the system and therefore shift the entire system and is functioning. The idea that the relationships are fundamental focus adds impetus to the concept that organisation learn, create and innovate through the interactions and invalidates the idea that an organisational system is programmable to follow a predetermined path.

While systems thinking provides insights into the relevance of hierarchy and relationships it does not always deal comprehensively with the inherent complexity of

organisational reality. Although systems thinking enables comprehension of the whole and the identification of relationships, it does not necessarily afford understanding of the complexity of the interactions. There are other approaches that attempt to understand the complexity of systems in organisations, such as network theory, chaos theory and complexity theory. The interactive and dynamic nature of the relationships suggest that change could occur at any point and could drastically alter the very nature of the relationships and hence organisation. This is the balance between a stable state system and changing state, which is also the domain of chaos theory. However, as a basis, systems theory provides a substantial conceptual building block for the organisational effectiveness.

4.3. Complex Adaptive System

It is not the intention to pursue an in-depth discussion of complex adaptive systems, but merely describe them in more detail than previous discussions in this dissertation. There are several issues that need to be elaborated:

- In a systems approach, and similarly in a complex adaptive approach, the system as an open-ended system is defined by the characteristic of innumerable number of possible states for a variance in any agents' (parts of the systems) behaviour.
- The type, characteristics and agents (parts of the system) have the ability to change and effect the behaviour of the systems in an unpredictable pattern
- Based on the above principle, the system has the ability to change its holistic characteristics as a result of a change in the relationships between the agents (parts of the system). This results in multi-perspectives of the system, depending where you are located within the system- that is the nature of interaction between the other agents (parts of the systems).
- This also implies that the system itself is constantly adapting. As "viewers" of the system we filter interactions, hence in a field such as strategy this results in a substantial ten different schools of thought on an approach to organisational effectiveness. All have their relevance, but each is not able to recognise the boundaries of its own paradigm or validate assumptions outside its own paradigm.

Reality cannot be seen in its entirety due to human cognitive processes. It is being suggested in this argument that the basic model for understanding complex strategy processes is firstly based on the principles of systems, secondly it is a complex adaptive system, and thirdly strategy perspectives are multiple and mirror system behaviours as strategy processes are constantly analysing and monitoring different parts of the whole organisational system. This implies a need for an interactive strategy which is discussed in later sections of this dissertation.

In an approach devised by Checkland(1993) there are three fundamental new ways of understanding systems:

- Hard systems approaches are fundamentally based on a means-end rationality
- "Systems" as a concept or notion is best employed as a means of organising our thoughts about problem situations, rather than as way of describing in a real sense portions of reality
- There are two paradigms, hard and soft, based on contrasting assumptions that lead to very different methodological principles

Much of the planning and "analytical" approaches to strategy are based on the assumption highlighted in the hard systems approach. It is the last two points that have the greatest relevance to current strategy work. Essentially the question that is being addressed is not one that is focused on "taming" strategy but rather, "how do we see our organisation operating within its environment?" This view is one of understanding which combination of methods and methodologies from the various schools will serve the organisations purpose best, but also understanding the assumptions that underpin the success and mental models of an approach. In other words is it an evolutionary or learning school or a combination.

4.4. Enter Strategy

Mintzberg used the term "beast" to describe strategy. This probably is the metaphor that describes the characteristics of the field of strategy the closest. The field is broad and

the literature almost never-ending. However, the essence derived after sifting through the literature is that there is a difficulty in seeing the complete picture. This seems to be a problem of several dimensions which begins with the need to have one solution, one paradigm and the one best way to approach strategy. In creating a better understanding of reality we construct models of the world. Constructing a model that would perfectly match reality is improbable. A similar argument is encountered in suggesting that all complex relationships can be analytically or behaviourally modelled. The same supposition is referred to in the argument that "language" limits our ability to innovate and progress our understanding of reality. The point being argued is that reality is the "beast", and as modellers, strategists, management and leadership theorists we are improving an understanding of the 'world' in order to simulate learning.

The implication for strategy making is that all schools have weaknesses as previously outlined, and a manager that dogmatically pursues one school will encounter the failures outlined. The strategy field has been through the divergent process of exploration. Currently there is a need for convergence in the strategy field but not from a basis of methodology or principle but rather from a practice-the area of praxis. "We need good practice, not neat theory." (Mintzberg, *et al.*,1994). It also has been noted that the strategy as a discipline is coming of age and that the practice of strategy is becoming more sophisticated through the emergence of hybrid models.

Volbreda and Elfring (2001) suggest a new approach to an integrative strategy school. This needs to begin from prior theoretical frameworks, which have been previously detailed. They further suggest that a combination of theoretical frameworks moves toward resolving the problems of strategy and that each new theoretical perspective gains credibility in its ability to resolve the current strategic dilemmas. One of the fundamental problems the strategy school is currently experiencing is a divergence in 'thinking' with the addition of more sophisticated theoretical frameworks, not necessarily derived from the experiences of practice. Although Volbreda and Elfring do suggest the need for empirical data, the emphasis of the research should be from a practice approach to inform theory.

Volbreda and Elfring however do make considerable progress in outlining further developments in the process of strategy development and suggest several propositions based on the current dilemmas experienced in strategy:

- ***Proposition 1: The strategy development process will typically be characterised by an inter-relationship between perspectives:*** There are typically three meta-theories; strategy as rational and deliberate; bounded rationality-management perception of reality out there; and management as reactive agents to responses from the environment. It is suggested from a detail questionnaire response, that in organisations, it is a mixture of these three meta-theories in use depending on the manner in which management perceives strategy development in the organisation.

- ***Proposition 2- There will be variations to strategy development processes:*** Different strategy processes are influenced dependent on the context. Further, at industry level there is a difference in the patterns hence different approaches are required for different industries.

- ***Proposition 2a- Variations of strategy development exists at the industry level:*** If it is taken that the unit of analysis is an industry sector, then one notices definite differences in strategy approaches across different industry sectors. It is also suggested that there are different cultures within different sectors, hence the dominant strategy model needs to be acceptable in order to be adopted.

- ***Proposition 2b- Variations of the strategy development exists at organisational levels:*** The approach to strategy at an organisational level is severely influenced by management or a manager's perception of how strategy should be approached. This is influenced greatly by the mental models managers hold about the world. It should not necessarily be an assumption of strategy that homogeneity does exists across management.

- ***Proposition 2c- Variation of the strategy development process exists at management level:*** There exists a difference in approaches to strategy at different management levels with CEO's viewing the process as planned and incremental while senior managers view the process as one influenced by politics and external factors.

- ***Proposition 3- Patterns of strategy development will change over time:*** As the context, organisation and the management change within an organisation, views on approaches to strategy will also change depending on several factors. However a critical conclusion is that although there exists similarities and differences in the pattern of strategy development processes, more attention needs to be given to understanding the relationship between context and strategy process in order to provide more meaningful evaluations of strategy processes.

Volbreda and Elfring summarised these propositions based on an extensive questionnaire of perspectives of strategy processes. These assumptions have validity and are based on detailed empirical data. They are helpful in understanding current practices and problems of strategy. In fact if the propositions hold true, then we are suggesting a very contextually driven approach to strategy and possibility of further fragmentation of the strategy field. Although this research is insightful in creating empirically based perspectives, in attempting to create a hybrid approach or a new strategy paradigm one would need to understand the generalised processes of the field and not the contextual issues. It is also suggest that contextual issues of an industry are well understood. However the problems generated for strategy process is driven from the generalised models and processes of strategy not adequately developed to deal with "outside" impacts, i.e. the environment influences on the organisation. This again reinforces that in strategy models, the analysis must focus on the nature of relationship between the different parts of the system- within the organisation and in the environment. This highlights that organisational design in relation to the environment is a critical part to creating effective strategy processes.

The integrative model is based on a configuration of several strategy approaches in order to suite the context. This, as Mintzberg suggested, is a hybrid. A configuration of different schools creates new theoretical approaches but is not a synthesis in a complete form. It is a more robust theoretical framework in response to complex environments, as no realistic alternative strategy processes exist to form the basis of new processes.

4.5   Framing Strategic processes

In elaborating a systems approach to strategy, the problems of constructing reality need to be considered. In other words, how are frameworks and methodologies constructed to better deal with the complex nature of reality?

Flood and Jackson (1991) in their discussion on a system of systems methodologies outline the following:

- problem definition is mainly as a result of how the problem is conceptualised.
- problem domains to a large extent are a function of the perspective/mental models a person holds of the problem.

Therefore there is a critical need to frame the problem domain carefully. Flood and Jackson(1991) suggested that in conceptualising problems a dominant metaphor influences the problem hence the solution. That is, if a mechanistic approach is chosen, assumptions highlighted would be in the mechanistic domain. The choice for the manager is then the metaphor that would best help solve the problem.

The diagram below (Table 4.1) was originally constructed to categorise systems applications so as to create a system of systems approach. For the purposes of strategy, which is the primary concern of this dissertation, the table below is interpreted and used as a tool for categorising problem contexts or otherwise stated, the type of relationship between environment and organisation. It is apparent from the previous discussions that in order to fully grasp why a particular school is appropriate or inappropriate for a context, the assumptions and positions that school is based upon, needs to be surfaced. It is further highlighted that this interpretation of the problem continuously influences the interpretation of the context. The main concern of strategy is the process whereby an organisation analyses its environment. It therefore stands to reason that it is the process of data collection and analysis of the environment that needs deeper interrogation. In the collection of data and the preparing of an analysis, the critical element of the process is setting the correct assumptions. In other words ensuring the parameters for the data collection and analysis are correct. This, in terms of a systems language, would be the process of surfacing assumptions. The table below

(Table 4.1) is a tool that surfaces assumptions embedded in the process of collection and analysis of data about the environment.

The vertical axis, that is, "Unitary", "Pluralist" and "Coercive", are labels given to the different types of perceptions individuals hold about a problem context. The horizontal axis, that is, "Simple" and "Complex" are labels for the two types of systems.

	Simple	Complex
Unitary	**Simple-Unitary:** key issues are easily appreciated, and general agreement is perceived between those defined as involved or affected.	**Complex-Unitary:** key issues are difficult to appreciate, but general agreement is perceived between those defined as involved or affected
Pluralist	**Simple-Pluralist:** key issues easily appreciated, but disagreement is perceived between those defined as involved or	**Complex-Pluralist:** key issues are difficult to appreciate, and disagreement is perceived between those defined as involved or
Coercive	**Simple-Coercive:** key issues are easily appreciated, but suppressed disagreements are perceived between those defined as involved or affected	**Complex-Coercive:** key issues are difficult to appreciate, and suppressed disagreements are perceived between those defined as involved or affected

Table 4.1 A Matrix of different perceptions used when Defining Problem Context, Source: Midgley (1995)

In defining the characteristics of problems whether related to strategy, or organisational inefficiency, or long-range planning for strategic initiatives, it is possible, indeed helpful, to consider the problem relative to the above framework. This highlights the fact that there are assumptions, which influence the thinking about problems and the manner in which it is framed. Argryris(1994), Handy(1994) and Kolb(1984), emphasise the role that pre-conceived ideas play in the development of solutions. In the field of strategy,

therefore, it is necessary to understand the assumptions underpinning thinking or mental models.

Morgan's (1996) view of organisations through the use of metaphor is also helpful in this regard. In his view, it is possible to classify approaches to organisational thinking according to the predominant metaphor prevailing in the organisation. This can be extended to the application of appropriate approaches to strategy as it highlights dominant mental models that underpin a manager's perception. Therefore the use of metaphor as a tool for learning can be a critical part of the cognitive processes in strategy. Morgan defines the following ten metaphors of organisation as follows:

- **The machine metaphor:** The typical example of this form of organisation is the bureaucratic organisation. Modern management theorists such as Taylor promoted the idea of organisation as machine with work-studies, Henry Ford's assembly-line and more recently business process reengineering.

- **The organismic metaphor:** This was the application of biological sciences to social theory. This has had an influential impact on organisational theory with concepts such as open systems theory and contingency theory.

- **The brain metaphor:** The brain metaphor provides valuable input in understanding the organisation as a cognitive system that embodies a structure of thought as well as a pattern of action. Cybernetic theory of organisation was a significant application of this metaphor in organisational theory. It highlighted an organisational system for communication and decision-making.

- **The culture metaphor:** "culture, or civilisation....is that complex whole which includes knowledge, belief, art, law, morals, customs, and any other capabilities and habits acquired by man as a member of society". This view in understanding civilisation and social interactions was applied to another form of social networks, the organisation. Examples of this metaphor are the impact of leadership on corporate culture and how language shapes organisational reality.

- **The political metaphor:** Areas that are highlighted when studying the organisation as a political metaphor are interests, conflict and power. It is the relationship between these three areas that forms the pivotal idea of organisational politics.

- **The psychic prison metaphor:** It is suggested that people create worlds which then imprison them. This metaphor is explored at different levels in this dissertation and an example of this is the use of paradigms and mental models in framing how we think about organisations and problems.

- **The flux metaphor:** This metaphor in essence deals with the complex ideas of implicate and explicate orders, autopoiesis, mutual causality and systemic wisdom. This kind of analysis attempts to find an explanation for the deep structure of social life and some kind of structural logic.

- **The dominant metaphor:** It is a widely published metaphor and is applied in terms of the dominant position the corporate world imposes on the individual, organisations and the environment. This metaphor should become part of a primary framework for organisational analysis as many organisations have a significant role in modern society although they hold questionable records with regard to environmental and workforce concerns.

The figure below (Figure 4.1) relates these metaphors to a typology of systems, that is simple and complex and perceptions of problems contexts that are unitary, pluralist or coercive.

UNITARY **PLURALIST** **COERCIVE**

SIMPLE

Machine

Organism

COMPLEX

Teams

Neuro-cybernetic

Coalition

Culture

Prison
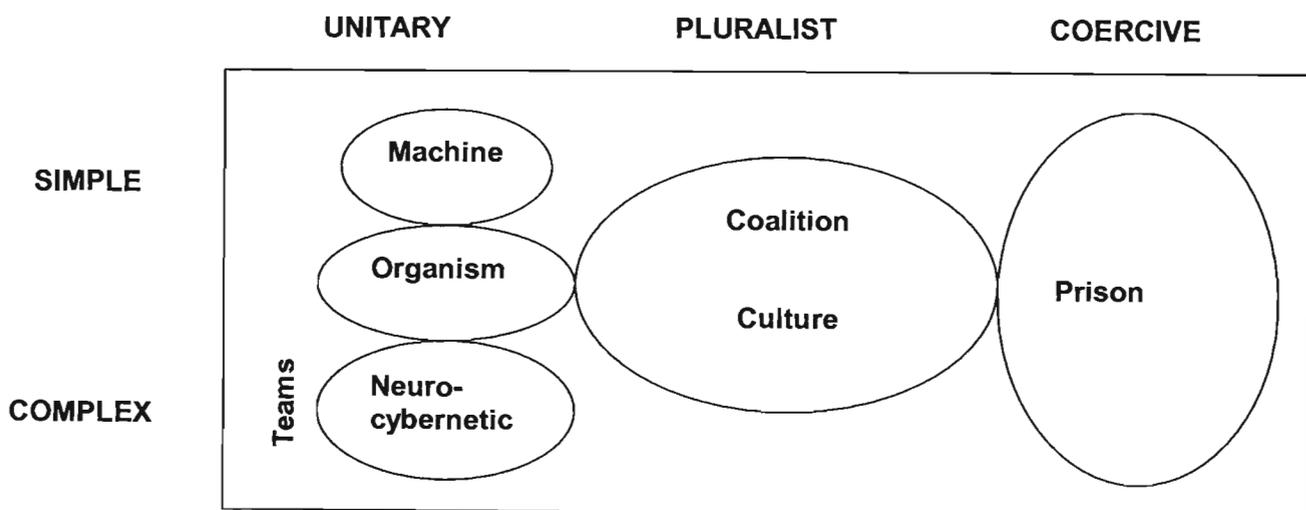
Figure 4.1 Jackson and Flood's diagrammatic ordering of Morgans ten metaphors

This provides a basis for determining the appropriate use of systems approaches to organizational problem solving. This becomes more apparent when attempting to understand firstly the broad field of strategy and secondly the complex relationship between organisation and environment. The use of this table as a tool is developed in greater detail later in this dissertation. Using the above Figure 4.1, it is possible to group the various schools of strategy according to the metaphor which appears to represent in the dominant thinking of that school.

4.6. A Systems grouping of Strategy schools

- *The Design School (Machine):* This school of thought was strongly based in the command and control model. The school relied heavily on analytical processes to evaluate strategic choices. Although the school identified problems as being either simple-Unitary or complex-Unitary their tools and organisational thinking was underpinned by the mechanistic approach.

- *The Planning School (Machine):* The planning school is an elaborated version of the design school and therefore did not change any fundamental assumptions of the strategic thinking approaches.

- *The Positioning School (Machine):* Although this school broadened the scope of strategic management, it applied the same assumptions and principles as the planning and design school, hence its organisational perspective of the world was mainly a mechanistic one.

- *The Entrepreneurial School (Culture and Coalition/Prison):* The position adopted by this school in its approach to solving strategic choices exhibits similarity to a simple-Unitary perspective in that the vision is determined by the leader. Although not dependant on analytical tools, the reliance upon one individual to understand the complexity of the behaviour between organisation and environment indicates to some extent that a simple-Unitary perspective is being adopted. However, in terms of a dominant organisational culture adopted by this approach, the norms and values are reflected in the leader of the organisation. It is also possible that, at times, the organisation can become politicised due to the influence of the leader.

- *The Cognitive School (Coalition and Culture):* This school views strategic choices as a complex process as a result of the differing perspectives individuals hold about reality. In terms of defining their fundamental assumptions they fall into a simple-Pluralist and complex-Pluralist category. The organisational thinking would be based in terms of the values and norms the people within the organisation hold, as it is perspectives of reality that are important to this school. This inherently depends on the value positions that individuals hold. It is the very nature of differing value positions that would also make reaching one common purpose difficult therefore compromise is required. This suggests a complex-Pluralist approach. Culture would become a strong organisational metaphor.

- *The Learning School (Neurocybernetic/Organism/Coalition and Culture):* The complex-Unitary and the complex-Pluralist approach is strongly featured in this school. The system is seen to have a complex interaction with its environment. However, some general agreement in the goals to be pursued is assumed. The school also sees the future to be unknowable so that agreement on one view is difficult. That is, in terms of the organisation behaviour, it has many different ways of interacting with the environment.

- *The Power School (Prison):* This school takes a view that strategy is more about the influence one exerts in order to achieve a strategic choice and that the environment is therefore is solely influenced by the decision making of the organisation. This reflects a simple-Coercive problem solving mode and a prison organisational metaphor.

- *The Cultural School (Coalition and Culture):* As Mintzberg(1994) suggested strategy in this school becomes a deliberate process and requires a strong bond of values and beliefs. The simple-Pluralist approach is applicable as all individuals need to strongly agree on a set of values and beliefs that define how they perceive the organisation in relation to its environment.

- *The Environmental School (Organism/Neurocybernetic):* Due to the environment being the influence in the strategy process, the organisation is seen to interpret environmental forces and is passive. This suggests that although the organisation is open to the environment it has a selected number of choices that will determine its behaviour. This school approaches strategic

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choices from the complex-Pluralist view. This suggests that organisations have selected goals or options and therefore a neurocybernetic model has validity.

- *The Configuration School (Neurocybernetic/Organism):* Although this school offers an integrative approach, the complex-unitary seems to dominate the thinking of problem solving. It is suggested that a system can be constructed to suite common objectives. The type of system changes with different contexts and therefore the organisational metaphor is strongly organism, but has elements of neurocybernetic. The organisation is suggested to have some control feedback systems through its configuration so as to suite its context.

These organisational metaphors are underpinned by the dominant assumptions as reflected in Table 4.1 and Figure 4.1. This frames the organisational thinking from a particular perspective and provides a framework for much of the thinking that underpinned Volbreda and Elfring's statements on the analytical approaches to strategic management and their propositions.

This builds a broad framework that provides order for strategic thinking. Just as significantly, this is also a robust methodological framework that is an integrative approach and attempts to synthesise behavioural patterns so as to develop a more coherent approach to strategic planning. This framework is elaborated later in this dissertation to include the more complex issues in strategy work, that is the relationship between environment and organisation.

Although Mintzberg has brought some synthesis to the strategy field in terms of the schools of strategy, it does not create an integrative approach to strategy. Volbreda and Elfring(2001), have built upon Mintzberg's synthesis in their approach with the configuration of different schools. This configuration approach is a hybrid model. However hybrids are still in the domain creating one superior strategic approach. To create a robust framework, strategic processes are dependant on the context of the organisation, and an understanding of the assumptions that underpin the mental constructs (i.e. perspectives) that help managers decide on a strategic approach. The matrix in Figure 4.1 is a critical tool in a strategic process as it highlights the type of

organisation managers see themselves within. The type of organisation would, in turn, influence the type of strategic approach a manager utilises. In approaching a strategic problem, managers are not aware of this dynamic and believe their choices are objective and are made for the purposes of optimisation, neither influenced nor predetermined dependant on their mental constructs. Surfacing assumptions using the above matrix in Figure 4.1 brings a better understanding about the complexity a manager faces in making a strategic choice. The matrix is not adding to strategic models, but rather should be considered as the first basic process in understanding any complex problem. In the case of strategy we are attempting to understand the nature of the relationship between organisation and environment. In this way, managers are not using models for decision-making in complex problems but are analysing to providing key insights as an input into the decision-making process.

4.7 Strategic Approaches

This section of the dissertation builds on the framing of the different schools into dominant paradigms that inform strategic approaches or models. The matrix classification provides an understanding and surfaces the assumptions underpinning the different strategic models. It is a convergent process in development strategy phase and provides the basis for building upon current models in an integrative manner.

Although this is not a definitive approach to strategy which fully addresses the problematic elements of strategy making, the approach of interactive planning addresses some of the difficulties. This approach, proposed by Ackoff(1999) attempts to address the issues of complexity, rapid change, lack of common vision, and the other issues previously identified as being part of the strategy problematic. Ackoff's approach can be considered as an alternative perspective to strategic management schools, intended to inform a different practice model. It is not the intention of this argument to outline a new practice model for strategy practitioners. This perspective to planning is hoped to provide the next conceptual building block from a systems and complex adaptive system framework, as suggested in previous sections of this dissertation.

In the light of the above, it is useful to explore the nature of interactive planning, but also to note that the description of this approach has been modified to include additional

elements, based upon the need identified in this dissertation to accommodate the influence of organisational design and scenario planning on strategy. It must also be highlighted that the categorisation of the schools above in terms of the tables indicate that the strategic schools do not deal effectively with the critical problems of working in a Complex-Pluralist environment. Interactive planning is intended to focus mainly in this area of locus.

4.8   Interactive Planning

There are two concepts:

- the idea of "resolve" to "solve" problems whereby the manager uses a method of trial and error based on his/her experiences, which leads to a solution, that is "good enough"
- "solving" problems, which is an approach of optimising and is the application of scientific tools and methods to the "mess" (meaning the complex set of dysfunctional interactions between parts of a system, giving rise to problems) in order to attain best performance.

Neither of these prevalent approaches helps with the final outcome of a good strategy, however many of the tools and methods and approaches used in strategy and organisational development work are focused on these two methods.

The "mess" requires an interactive planning approach as a basis. There are two underlying assumptions, i.e. that the hierarchy of systems, as described above, is our unit of analysis; secondly, that behavioural dynamics of the system are being considered.

There are three principles that govern interactive planning. However, there is a fourth element that brings interactive planning into a more dynamic approach:

1. **"Participative" principle:** The first part of this principle is that the process of planning is more important than the plan that is produced. The planning

process helps to bring about common understanding of the organisation and between the members of the organisation. This reinforces the idea that no one can plan for anyone else, as it would take away the main benefit of planning itself. The second is all those who are affected by the plan should be involved in its conception. This is based on the principle that objectivity in social systems is value-based. This is alluded to in many of the new strategic hybrid models. In essence this principle states that all stakeholders are required to be involved in the planning process.

2. **Continuity:** This principle adds the concept that no plan is a constant state. That is the values of the stakeholders that devised the plan and the values of the social systems in the environment would have changed. Planning and the planning models should allow for such change. The other concern is that no plan can predict everything. These two assumptions imply a principle of continuity in the plan itself and that is planning and planning models that require an interactive element in order to deal with change.

3. **Holistic:** Planning needs to occur interdependently in as many parts and levels of the organisation, and at the same time occur simultaneously. This is a matter of co-ordination which is the units at the same level should plan together, and at the same time, so that it is the interaction between the parts that become important. It is also about integration which is units at different levels should plan together and at the same time.

4. **Networks:** This element is built on the participative and holistic elements of interactive planning. One of the key processes that allow us to interrelate these elements of the systems is the requirement of a well functioning network. The concept of group processes and teamwork designed into the organisational structure is a key element to allow for dialogue to occur and hence the formation of a formal network within the organisation. Teams working at different levels and across different units are integrated and form into a network that will in turn form an alternative organisation structure that becomes an essential part of the system. This sort of network usually aligns itself with the formal hierarchy. However, there must be a constant process of dialogue in order to effectively achieve the holistic principle and the participative elements.

It also becomes a case of size and organisational design; too big and the connectivity is lost; too small and the diversity is reduced.

Using interactive planning as a strategic approach address, in part, the critical behavioural aspects of strategy. The fundamental relationship is between organisation and environment. Interactive planning provides the beginning of a framework within which managers can improve their conceptualisation of the relationship between organisation and environment, but it is not sufficient and therefore requires further developments.

4.9   Interactive Planning in Strategy

There are some basic tenets of strategy that are apparent in all theoretical works. One of the fundamental assumptions about strategy is that we are attempting to make decisions about the future.

This also implies that there is a critical interface between organisation and environment. This interface is depicted in the diagram below (Figure 4.2):
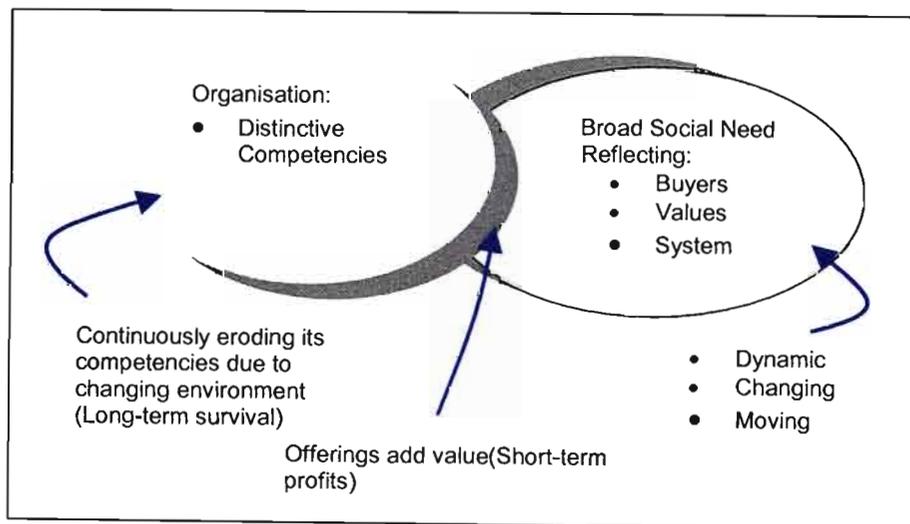
Organisation:
  • Distinctive Competencies

Broad Social Need Reflecting:
  • Buyers
  • Values
  • System

Continuously eroding its competencies due to changing environment (Long-term survival)

  • Dynamic
  • Changing
  • Moving

Offerings add value(Short-term profits)

Figure 4.2 An adaptation of a Scenario Conceptualisation of the interface between Organisation and Environment

This relationship is characterised as being dynamic, complex, rapidly changing and unpredictable. The current pace of change within environments is typical behaviour of complex systems. Traditional models of management, in particular the modelling of environments is incapable of dealing with rapid change processes. Managers, in their effort to create organisational fitness, face challenges such as fast changing customer needs/values, difficulty with foresight and an increased need for a more adaptable and learning culture (Espejo, Schuhmann, Schwaninger, Bilello, (1996).

These characteristics are driven by the realisation that organisations are a part within their environments and co-exist in a symbiotic relationship. A second realisation is the dynamic nature of the relationship between organisation and environment. Stacey (1994) suggests the following representation (Figure 4.3):

| Far from agreement	4	*Garbage-can decision-making * Brainstorming & dialectical enquiry * Muddling through * Intuition	Disintegration & 5 anarchy OR massive avoidance
	2		• Unprogrammable decision-making 'outcomes' rather than solutions
			* Search for error * Agenda building
Close to agreement	* Technically rational decision-making & monitoring form of control	3	* Judgmental decision-making & ideological control: * logical incrementalism
	Close to certainty		Far from certainty

Figure 4.3 Source: Stacey R, Strategic Management & Organisational Dynamics (1996)

Organisations also constantly track the broad social changes to ensure its distinctive competencies add value within its context. Given that these assumptions hold true, the organisational model has been re-conceptualised to manage such issues as highlighted above in Figure 4.2. The critical element in such a case is, how does the organisation perceive itself within the environment and also perceive the environment? The relationship described above in Figure 4.2 can be developed into a more sophisticated view. For example, the development of scenario-based approaches to strategy represent an area for further discussion. This lies beyond the scope of this dissertation.

Essentially Stacey is suggesting that the environment operates at two extremes, far from certainty where very little can be told about the future, and close to certainty where the environment is fairly stable and the future can be based on assumptions that will more than likely be true. In terms of decision-making, the organisation works at two levels, i.e. one where we have agreement and a second extreme where there is very little agreement. Stacey suggests that with the different forms of complexity we require radical change and that an incremental approach to change will not work, hence shift in organisational paradigms occurs in a leap from one to another.

According to Stacey, the manager in current contexts operates in the area of unprogrammable decision-making, 'outcomes' rather than solutions, brainstorming & dialectical enquiry, muddling through, intuition. In terms of the Flood and Jackson classification (see Figure 4.1), this area of operation is "complex-pluralist" and "complex-coercive". For our purposes, Flood and Jackson's framework is more relevant because it is necessary to understand why a particular strategy approach will not be correct so as to build a robust theoretical position. The questioning of assumptions that underpin the theory and practice of strategy must be a fundamental process in building a new theoretical position and to evaluate why current strategic processes fail.

It is being suggested, at this time, that it is not a singular approach or a singular conceptual model, but rather a set of guiding principles that is required to form the basis of strategic development processes. In other words, concepts such as business modelling, learning and value-based decision-making are all important issues in

organisational efficiency and part of strategic development processes. What is presented in this dissertation is a system of principles that inform, and are informed by, the actual processes of strategic development.

The objective position is seen to be vital in the decision-making process. The assumption that is made in this dissertation is that an objective position is not possible and it is the embedded nature of a value system within the decision-making process that is the first critical stumbling block to effective strategic processes. It is therefore apparent that in order to frame strategic thinking and in turn strategic processes, a system for evaluating value positions needs to be outlined. A new strategic approach has its basis in the evaluation of embedded value positions. It is also noted that the rationale for any strategic decision is based on a set of assumptions the management team makes about the future. In order to fully understand and these assumptions the underlying value positions that give validity to the assumptions need evaluation.

CHAPTER FIVE

CONCLUSIONS

5.1   Guiding Principles for Strategic Processes

The guiding set of principles outlined is not created to achieve one aim or goal, but is rather a means to getting to a future that is not yet determined. Therefore the process of engagement about possible futures is more important than the development of a single strategic view. The idea that no single strategic view is correct is another assumption that this dissertation holds as valid. The strategic view of the organisation as a predicted certainty is given to be false as it is being suggested that the strategic view of the organisation is constantly evolving over time. It has been shown by processes such as scenario planning that the purpose is not to get one future correct but to create multiple futures that shift the assumptions of the leadership as the future unfolds. The guiding principles outlined below therefore help to define the nature of the strategic dialogue in order to focus discussions.

A suggested set of guiding principles for strategy formulation, arising from the foregoing (specifically the Flood and Jackson categorisation), are given below:

Principle 1: Defining of boundaries of the organisation are important. Recognising that they are value-based and evolving is critical. Part of this boundary definition is deciding with whom business is to be done, who are the partners, suppliers and competitors.

Principle 2: The business idea from which the business model is derived is contained with the boundary you scope out. The business model is a key determinant of how to configure the parts of the organisation but also create organisational efficiency and change within the organisation and hence in the environment.

Principle 3: Problem solving in a creative, participative and change orientated context is about grounding the transformation and institutionalising the change within the

organisation. It is also about implementing that business model within the organisation that adds the value to the customers

Principle 4: Cognitive processes of strategic development are just as important as the action orientation of strategy. Understanding process helps bridge the gap between mental constructs and practice.

Principle 5: Practicing leadership is the driver of the "change" you wish to bring about. Your strategy can be seen as the change for the future. The practice of leadership is then not about base disciplines from which you create strong conceptual models, rather it is about transcending the discipline boundary and interlinking as reality is a complex set of interrelationships and not confined to one discipline. The practice of leadership is also about understanding change and its constituent parts of the system. Leadership is also fundamentally about learning and unlearning as we "evolve".

Principle 6: There is a dominant paradigm for organisational thinking that characterises strategic work. Arguments presented in this dissertation, indicate that the evolutionary paradigm is possibly one of the most appropriate. In terms of this paradigm, the purpose of strategy is to bring about organisational and environmental change. The evolutionary paradigm allows a strong focus on the human implications of strategy.

Principle 7: Strategy should be more process focused, rather than located within the rules and norms of specific disciplines or schools. The conceptualisation of the problem is therefore central and the means for exchange or dialogue about the problem should be the focal issue in strategy development.

Principle 8: Many systems concepts can inform our processes in boundary judgements, learning and cognitive processes. Particular practices, such as strategy as an interactive plan and strategy as a complex adaptive system should come to inform processes and must begin to influence the operating paradigms of practicing managers.

5.2 A Systems Approach

The purpose of this dissertation was to:

o Review the various approaches to strategic planning

o Consider the development of organisational thinking, specifically focussing on the organisation/environment interface as a determinant of organisational form

o Consider the implications of systems thinking and the current popularity of the concept of the learning organisation for strategic planning

o Provide system for categorising the diverse schools of strategy to propose a system of strategy approaches.

In pursuit of these objectives, the dissertation dealt with the following:

- **Chapter 2.** *Reviewed the various approaches to strategic planning.* The summary, in presenting an overview of strategic models, provided a series of "snap-shots" of the strategic problematic. The schools partly covered some of the concerns but are incomplete in themselves. The specific dilemma is that the adoption of the approach of any one school is limiting, not only in terms of understanding the strategic problem but also in terms of the ability to appropriately combine different approaches. The framework necessary to lend understanding to the strategic problem begins with seeing the organisation as being embedded within the environment and in constant interaction with it.

- **Chapter 3.** *Considered the development of organisational thinking,* specifically focussing on the organisation/environment interface as a determinant of organisational designs. This chapter indicated that the nature of the contemporary organisational context would lend itself to systemic approaches. This chapter elaborated a more detailed understanding of organisational design given the systemic implications of the environmentally embedded nature of organisations.

- **Chapter 4.** *Considered the implications of systems thinking for strategy* and provided a system for categorising the diverse schools of strategy to propose a system of strategy approaches. One of the purposes of this dissertation is to propose a framework for synthesising the lessons and assumptions of the ten schools of strategy. This, in essence, constitutes a systemic approach, where it is argued that the system should be analysed as a coherent whole. Therefore the imperative was a framework that would provide understanding as to why a particular strategy approach will not be correct. This provides insight in order to build a robust theoretical position. The questioning of assumptions that underpin the theory and practice of strategy must be a fundamental process in building theoretical positions and to evaluate why current strategic processes fail.

- **Chapter 5.** *A strategic approach is based on the evaluation of embedded value positions.* The assumption that is made in this dissertation is that an objective position is not possible and that it is the embedded nature of a value system within the decision-making process is the first critical stumbling block to effective strategic processes. It is therefore apparent that in order to frame strategic thinking and, in turn, strategic processes, a system for evaluating value positions needs to be outlined.

This dissertation therefore attempted to provide a framework for bringing a systems approach into the field of strategy. Although the strategy "body of knowledge" does cover elements of systems approaches and are underpinned with similar principles, such as implied by the learning, configuration and environmental school, there is no general framework from which to create a coherent synthesis in the field. This was seen to be central to the process of creating a complete picture of the strategic problematic.

Chapter two, which provided detailed overview of ten schools of strategy, demonstrated the lack of commonality or coherence of approach. The impetus for the development of a framework for systemising and synthesis derives from the view of Mintzberg (1994) the field of strategy was entering a stage where hybrid approaches are emerging, with an attendant need to understand the entire picture. The fact that strategic models fail to

deal with the complexity of the concerns highlighted in this dissertation is indicative of the need to develop new approaches to the strategy process.

The concept of change implies an element of improvement. Change in social context, specifically the organisational context, strongly implies purposeful improvement. The assumption of organisational change processes therefore is "change for purposes of improvement" in terms of growth and development. These terms, although seemingly synonymous, like planning and strategy, have embedded within them some fundamentally different, but complementary, assumptions. For the purposes of this argument and dissertation, development has broader implications for strategy than growth. Therefore an assumption of the strategic principles highlighted is one of strategy for development and then growth. The rationale for this order is that development includes principles of learning while growth implies a position of scale or size, where learning is not a prerequisite.

Once a systems approach to strategy is adopted, concepts of development and growth are embedded in the strategic processes and organisational design. That is, in order to drive strategy as a basis for development and growth, the organisation requires the various parts of the organisational knowledge base to function collectively (i.e. by synthesis). This, in effect, would require a networked design so as to form a new development and growth platform for the organisation. A relational theory therefore becomes the focus, and synthesis is a key process for new knowledge generation and hence strategic growth. It is fundamentally about integration processes. This has implications for the way in which we lead organisations. However, in bringing clearer understanding to the way in which organisation and environment are interacting in this integration process we need a global understanding of the system. "Global" implies an understanding of the whole. Systems approaches are based on understanding the functioning of the whole. Organisations do not naturally tend function as part of a whole or global system. Rather organisations tend to function as individual entities forming a part of industries. Systems within organisations therefore are currently not specifically geared toward bringing global understanding. Although the global integration process is currently in its infancy, organisations are impacted upon by the fluctuations of this integration process. It is also important to note that organisations can create entirely

new industries and therefore can drive this global integration. The basis of the framework for systemising and bringing a synthesis to the strategic fields has a strong basis.

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