ISSN 1038-7448 , No.WP 99/20 (November 2015)

Contents lists available at ScienceDirect

International Journal of Information Management

journal homepage: www.elsevier.com/locate/ijinfomgt

Lessons from the Evolution of the Strategy Paradigm

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ISSN 1038-7448
No.WP 99/20 (November 2015)
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ABSTRACT

Review of the strategy literature indicates there has been five phases in the evolution of the field since World War II. The paradigm was at its peak in the 1970s with the strategic planning phase, however, prescriptive approaches to strategy formulation and implementation were demonstrated to be inadequate in this period in the face of environmental uncertainty. In the 1980s the field evolved into the strategic management phase with a focus on the combination of the firm's resources to achieve competitive advantage. The prescriptive literature progressed further in this decade with Porter's strong contribution in understanding the external context confronting organisations. The resource-based view of the firm, grounded in the descriptive literature, also enhanced the paradigm's knowledge of the firm's internal processes. However, despite these developments by the mid-1980s it was evident that the strategic management phase was not addressing shortcomings in strategy implementation. At this time a greater sense of the importance of organisational culture and internal politics developed in the strategy process. The ineffectiveness of strategic management in this decade led many experts to emphasise the need for strategic thinking. In the 1990s a debate has evolved as to whether strategy should be practiced as art, science or a combination of both.

INTRODUCTION

Appraisal of the strategy literature indicates there has been five phases in the evolution of the paradigm since World War II. Gluck, Kaufman and Walleck (1980) clearly describe the evolution of the strategic management process in four phases with phase three incorporating strategic planning and phase four strategic management. A fifth phase is now evident with the evolution of the paradigm from the strategic management phase of the 1980s to a more flexible form of strategic thinking in the 1990s (Stacey, 1993; Heracleous, 1998). This working paper sets out to discuss the evolution of the strategy paradigm, observe the internal and external demands on the modern business firm in this context, and use the key lessons from this background to provide input to a conceptualisation of strategic thinking in a later working paper.

THE EVOLUTION OF THE STRATEGY PARADIGM

PHASE 1

The first phase in the evolution of the strategy paradigm involved "basic financial planning" in the 1950s where the typical planning focus for the firm was the preparation of the financial budget with a time horizon barely beyond 12 months. These organisations tended to exhibit strong strategies however these strategies were rarely documented. The success of the organisation was dependent on the quality of the CEO and the top management team and their knowledge of products, markets and rivals (Gluck et al, 1980). In the literature Drucker (1954, p. 77) drew attention to this issue arguing that it is the role of top management to address the key questions with respect to strategy: "What is our business and what should it be?"

Interestingly, Selznick (1957, pp. 62, 67-68) in his book *Leadership in Administration* set the foundation for some of the basic concepts of the design school at this time:

"Leadership sets goals, but in doing so takes account of the conditions that have already determined what the organization can do and to some extent what it must do…

In defining the mission of the organization, leaders must take account of (1) the

> internal state of the policy: the strivings, inhibitions, and competences that exist within the organization, and (2) the external expectations that determine what must be sought or achieved if the institution is to survive."

Selznick (1957, pp. 62-63) also introduced the concept of strategy implementation when he referred to building policy "into the organization's social structure."

PHASE 2

The second phase of "forecast-based planning" in the 1960s resulted in organisations embracing a longer time horizon, environmental analysis, multi-year forecasts and a static resource allocation as the firm responded to the demands of growth (Gluck et al, 1980). Important contributions to the evolution of the strategy literature were offered in this period by Chandler (1962), Andrews (1965) and Ansoff (1965). In particular Andrews (1965) and Ansoff (1965) were the first writers to address explicitly strategy content and process.

Chandler's (1962) contribution from an historian's perspective explained the development of large corporations and the way their administrative structures changed to accommodate the demands thrust upon management as a result of business growth. Chandler (1962, p. 13) offered a broad definition of strategy which did not distinguish between strategy formulation and content noting: "Strategy can be defined as the determination of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals."

Andrews (1965) combined Chandler and Drucker's concepts of strategy, describing strategy as "…the pattern of major objectives, purposes or goals…stated in such a way as to define what business the company is in or is to be in and the kind of company it is or is to be" (Andrews, 1965, p. 28). He also introduced the concept of the SWOT analysis, seeking to match what the firm can do (internal strengths and weaknesses) with what the firm might do (external opportunities and threats). Andrews (1965, p. 181) identifies corporate strategy as "the chief determinant of…the processes by which tasks are assigned and performance motivated, rewarded and controlled…" Interestingly, the power of the Andrew's framework for strategic analysis - which provided the basis according to Mintzberg (1990) for the design school (refer Table 1, p. 13) - was recognised immediately. The shortcoming of the framework was that it provided little insight into how to assess either internal or external aspects of managing strategically (Harvard Business Review, 1995). In particular it has been argued the separation of strategy formulation and implementation impedes strategy development as a process of learning. A further criticism is that explicit strategy limits strategic flexibility with the firm committed to a clear direction (Mintzberg, 1990) which has been demonstrated in psychology to be difficult to change (Kieser, 1971).

Ansoff's (1965) interest in strategy evolved from a realisation that an organisation needs a clearly defined scope and growth direction, and his opinion that setting corporate objectives on their own is not sufficient to meet this need. He argues in his classic text *Corporate Strategy* that given the limitations of objective setting, additional decision rules are needed if the firm is to enjoy orderly and profitable growth. Ansoff (1965, p. 18) takes a prescriptive approach defining strategy in terms of strategic decisions which "…are primarily concerned with external, rather than internal, problems of the firm and specifically with selection of the product mix which the firm will produce and markets to which it will sell." Ansoff (1965, p. 95) perceives the firm's strategy as the "common thread" that gives "…a relationship between present and future product-markets which would enable outsiders to perceive where the firm is heading, and the inside management to give it guidance." Four components of this common thread are identified in his work namely, the product market scope of the firm, a growth vector specifying the anticipated changes in the organisation's present product-market position, competitive advantage and synergy. Mutual reinforcement of these four components enhances the firm's probability of success. Ansoff's work according to Mintzberg (1990) provided the basis for the planning school (refer Table 1, p. 13) and has been criticised on several grounds. Firstly, under some circumstances planning can undermine commitment to strategy implementation with line managers and some top managers excluded from the process. Second, line managers can resist centralised control imposed by formal planning

(Mintzberg, 1990). Thirdly, planning can be quite inflexible in times of environmental uncertainty (Steiner, 1979). Finally, planning constrains synthesis (Mintzberg, 1990). As we will see each of these criticisms has been justified in the context of events in later years.

PHASE 3

In the 1970s there was a move to the third phase of "externally oriented planning" in response to markets and competition as strategic planning enjoyed the peak of its popularity. Planning in this form included a thorough situation analysis and review of competition, an evaluation of alternative strategies and dynamic resource allocation (Gluck et al, 1980). Prescriptive techniques for strategy were at their peak at this time with the planning school dominant (Mintzberg, Ahlstrand and Lampel, 1998) and numerous simplified frameworks for strategic analysis were put forward mainly by industry consultants. These frameworks included the Experience Curve, the Boston Consulting Group's (BCG) portfolio matrix and the Profit Impact of Marketing Strategies (PIMS) empirical project.

Bruce Henderson, founder of BCG and a former Westinghouse Electric Company general manager, observed that over a period of time unit costs of production declined within a given firm. Henderson explained this observation in terms of the improvements in productive efficiency from experience. The experience curve was developed to provide the basis for estimates of future strategic cost advantages (Clutterback and Crainer, 1990). The experience curve estimated that "the unit cost (in real terms) of manufacturing a product declines approximately 20% to 30% each time accumulated experience doubled" (Naylor, 1982, p. 9). Given that this relationship holds, then improved market share (and further experience in production) contributing to reduced production costs, gives a competitive advantage against rival firms and provides a barrier to entry for potential rivals. Porter (1982) criticised the experience curve on the basis of its simplistic explanation of unit costs, an inadequate consideration of economies of scale, and the exclusion of market conditions and competitive behaviour. Porter (1982) also questioned whether cost behaviour considerations in one industry can be applied to another, the extent to which a firm's "experience" is proprietary, and competitors benefiting from a leading firm's "experience". On the positive side of the ledger BCG's experience curve focused attention on the key issues of the value of investment in productive capacity, sources of this investment capital, and resource distribution between divisions in multi-divisional firms. The BCG Growth/Share Portfolio Matrix developed from here.

The BCG Growth/Share Portfolio Matrix was the most popular framework devised for structuring portfolio decisions. It is applicable at the corporate rather than the business level and assists in determining resource allocation between divisions in the corporate portfolio (Clutterback and Crainer, 1990). The Divisions or strategic business units in the corporate portfolio are classified according to the dimensions of market share and market growth rates. A matrix of four categories - "stars", "problem children", "cows" and "dogs" - applies. Each of the categories, and the SBU's placement within those categories, has implications for organisational learning, investment and cash flow from the respective SBU's. The key shortcoming of the BCG matrix is that it does not address SBU strategy. Further, it considers too few factors to reliably guide strategy at the corporate level, and focuses on cost and growth at the expense of the market environment which also has implications for SBU outcomes (Hax and Majulif, 1983). In his defence Henderson observes that the matrix was never designed to be prescriptive (Clutterback and Crainer, 1990). The focus of the matrix was to allow managers to think and talk about their business in different ways and experiment with the various interactions between the firm's parts (Clutterback and Crainer, 1990).

High Market Share Low Market Share

High Growth

Low Growth The PIMS empirical project was established by Harvard University academic Professor Sid Schoeffler, an industrial economist. He established a substantial database which facilitated the construction of models of markets. This database also facilitated the analysis of a range of market conditions and strategies. Clutterbuck and Crainer (1990, p. 145) looking back on this work observe:

STARS Modest + and or – cash flow	PROBLEM CHILDREN Large negative cash flow
COWS Large positive cash flow	DOGS Modest + or – cash flow

> "(Schoeffler) believed that if only you had a broad enough data base, you could model the behaviour of markets sufficiently well to pull the right levers and be reasonably sure of the profits that would result".

Factors such as rate of growth, degree of market concentration, market share, product quality and the productivity of capital and labour were considered. Porter (1982) argued the PIMS approach had its shortcomings in that it is a highly inductive method with several questions unresolved over the suitability of certain measures employed. Further questions remain over the applicability of PIMS across industries, in particular those industries not included in the database. A final criticism is that PIMS abstracts from the difficulty of managing uncertainty in basing decisions on probabilities obtained from historical data. Naylor (1982) has argued the real benefit of the PIMS project has been the database itself rather than the prescriptive applications.

The strategy literature consistently observes that planning models of the period tended to focus to their detriment on the analysis of internal financial data, became a process that excessively absorbed staff time and energy (Wilson, 1994; Mintzberg, 1994), and did not achieve the positive relationship with firm performance expected (Shrader, Taylor and Dalton, 1984; Scott, Mitchell and Birnbaum, 1981). Later research has shown this point with respect to the planning-performance relationship to be contentious (Miller and Cardinal, 1994; Schwenk and Shrader, 1993). Prescriptive approaches to strategy formulation and implementation were demonstrated to be inadequate in the face of an uncertain business environment (eg. significant external economic shocks such as OPEC I and II) illustrating the shortcomings of the Andrews (1965) and Ansoff (1965) approaches in particular. As a result this period saw the commencement of a trend to shrink strategic planning departments in corporations and reduce their organisational power in response to the lessons learned (Stacey, 1993).

Clearly the enthusiasm directed toward strategic planning in the early 1970's did not survive for long. Mintzberg (1990) argues that the lesson from this period is that both learning and deliberate strategy is needed, and that these two processes should intertwine. Mintzberg (1978) in his insightful *Management Science* article “Patterns in strategy formation” defines strategy as “a pattern in a stream of decisions”. He draws three pertinent conclusions from his observation of the evolution of the strategy paradigm in this decade. Firstly, that the formulation of strategy can be viewed effectively as the interaction between a dynamic business environment and the momentum developed by a bureaucracy. Secondly, strategy formation over time tends to follow life cycles. Finally, research of the interplay between intended and realised strategy can lead to the centre of an organisational process with some complexity. These observations remain an important development in the strategy paradigm and provided important impetus for future work.

PHASE 4

In the 1980s firm’s embraced what became known as the strategic management phase -the fourth phase - being the combination of the firm’s resources to achievecompetitive advantage. This phase included:

> “(1) A planning framework that cuts across organizational boundaries and facilitates strategic decision making about customer groups and resources. (2) A planning process that stimulates entrepreneurial thinking. (3) A corporate values system that reinforces managers’ commitment to the company strategy” (Gluck et al, 1980, p. 158).

The strategy process came to be increasingly performed by line managers with occasional assistance from internal strategy experts operating in fewer numbers compared with the past. Initiatives in the field were driven by unprecedented levels of change and complexity confronting organisations (Prahalad and Hamel, 1994) as firms endeavoured to keep pace with environmental developments. At this time there was also a shift from quantitative forecasting to greater use of qualitative analysis (Stacey, 1993). The focus became establishing the firm’s mission and vision for the future, analysis of customers, markets, and the firm’s capabilities (Wilson, 1994).

During this period there were a number of valuable contributions to the strategy field drawing on related disciplines in the social sciences. Porter (1980, 1985, 1990), drawing on the structure-conduct-performance theory in industrial-organisation economics made a particularly important contribution in this context. The analytical frameworks he has devised including five forces analysis, the value chain, the diamond model of competitive advantage and strategy as activity system became valuable tools in strategic management which were lauded by academics and practitioners. This analysis emphasised the industry situation confronting the firm and its position within that industry. Interestingly, Porter's contribution has been criticised (Mintzberg, 1990; Bartlett and Ghoshal, 1991) for narrowing the focus of strategic management. Further, the fields understanding of internal processes failed to develop at a similar pace (Bartlett and Ghoshal, 1991). Porter's work was assigned to the positioning school by Mintzberg (1990) on the basis of its focus on a firm's strategic positioning in its market or industry and this approach dominated the decade.

Another valuable contribution grounded in economics was made by writers such as Wernerfelt (1984), Barney (1991) and Peteraf (1993) and others building on the earlier work of Penrose (1959) in relation to the resource-based view of the firm. The resource-based view assists in addressing weaknesses in the paradigms understanding of the internal processes in Andrews (1965) early work. The significance of this approach is that it has combined the internal analysis of the firm with a more effective understanding of how to use what we know about the external industry and competitive environment for the firm. Its strength is that it explains why some organisations operate more profitably than rivals and how core competence can be put into practice and is helpful in developing diversification strategies that are well reasoned. In this context firms are perceived as very different collections of physical and intangible assets and capabilities. Businesses are in the best position to perform profitably if they have the most favourable allocation of resources with which to execute business strategy (Collis and Montgomery, 1995). The resource-based view of the firm has been criticised for the lack of an emerging consensus with respect to key concepts, terms and frameworks to assess firm capability. Further, there is no one leading writer in this branch of the field - such as Porter is to competitive advantage to lead the debate (de Wit and Mayer, 1998). These criticisms provide little comfort for practitioners seeking analytical guidance.

PHASE 5

By the mid-1980s it was evident that the changes in the evolution of strategic planning into strategic management were not leading to significant improvements in strategy implementation. In addition, at this time there was apparent a greater sense of the importance of organisational culture and internal politics in the strategic management process (Wilson, 1994; Bonn and Christodolou, 1996). The ineffectiveness of the strategic management process led many experts in the field to emphasise the need for strategic thinking - the fifth phase in the evolution of the paradigm. In this context Stacey (1993, p. 18) observes:

> "…that although the procedures and analytical techniques of modern strategic management may not be of much direct practical use, they do create a framework for strategic thinking and, it is assumed, managers who think strategically are bound to act more effectively in dealing with the future."

That the strategic management process provides a framework for strategic thinking is an important foundation in attempting to conceptualise strategic thinking.

It is the contention of this paper then that in the 1990s the paradigm has evolved further with the emergence of strategic thinking to aid and facilitate strategic planning and strategic management. The evolution of the paradigm from strategic planning to strategic management into strategic thinking reflects the economic, technological and social changes that have taken place since its inception in the mid 1950s, especially since 1984 (Aggarwal, 1987; Prahalad and Hamel, 1994) with higher levels of environmental uncertainty evident placing greater demands on the strategy process in organisations. Indeed, the day-to-day challenges of management bring forth issues that test established frameworks, policies and procedures within organisations designed to deal with them. The major task of managers is to determine when to apply these established frameworks, policies and procedures and when to ignore them and develop new solutions. Strategic thinking facilitates this process (Stacey, 1993).

Ohmae (1982) was the first of the leading management writers to talk about strategic thinking in his text *The Mind of the Strategist*. Here Ohmae (1982) argues that successful business strategies flow from a particular mental approach, which is essentially intuitive and creative rather than rational. The evolution of the paradigm has set off a new debate on the merits of balancing intuitive, creative, divergent thought with rational, analytical, convergent analysis. A dialectic debate has evolved with writers in the descriptive and integrative literature such as Ohmae (1982), Peters and Waterman (1982), Mintzberg (1994) and others arguing the case for strategy as art, whilst writers such as Porter, Andrews (1965) and Ansoff (1965) from the prescriptive literature are used to support the argument that strategy should be conducted as science. Interestingly, Mintzberg (1994) is particularly strong in his support for the use of intuition in preference to analysis, criticising the timeliness and availability of hard data though more recent developments in information technology (Ferguson, 1996; Sauter, 1999) bring this argument into question. There is a further group of writers who see the need to balance the use of intuition and analysis in the strategy literature (Wilson, 1994; Raimond, 1996; Liedtka, 1998a, 1998b; Heracleous, 1998). Here Liedtka (1998a, p. 121) makes a meaningful observation: "…the literature draws a sharp dichotomy between the creative and analytic aspects of strategy-making, when both are clearly needed in any thoughtful strategy-making process." This debate is elaborated in a later working paper. It is interesting that Mintzberg et al (1998) updating Mintzberg's (1990) contribution on planning schools recognise a new "eclecticism" in the paradigm in the light of recent developments as the strategy process evolves in trying to cope with the demands of an uncertain business environment. Certainly there has developed a greater appreciation in organisations of the usefulness of the strategic management framework, organisational learning, organisational politics, organisational culture, cognition and reasoning, the related field of decision-making, and group dynamics in recent years as firms strive to cope with change and complexity in the business environment.

PLANNING SCHOOLS AND

LESSONS FROM THE EVOLUTION OF THE PARADIGM

Several writers (Scendel and Hofer, 1979; Fahey and Christensen, 1986; Huff and Reger, 1987; Mintzberg, 1990; Montgomery, 1988; McKiernan, 1997) have sought to classify the relatively youthful strategy literature into particular schools of thought, particularly in the second half of the 1980s. Rouleau and Seguin (1995, p. 101) observe that these efforts to classify the literature "grow out of the practical categories used in the field and thus contribute to perpetuate the issues already preoccupying firms." A negative aspect with respect to this branch of the literature is that these classifications serve to reinforce a field that focuses on action at the expense of reflection. For the purposes of this study Mintzberg's (1990) planning schools classification of the literature is preferred. This work has been updated with the offerings of Mintzberg et al (1998) and Mintzberg and Lampel (1999) and provides both depth and an appreciation of the new "eclecticism" of the paradigm in the 1990s driven by the demands of the environmental context, facilitating a more precise understanding of developments in the field. Specifically there has been a higher level of appreciation of macro aspects of the power school and the cognitive school. There has also been greater attention given to the configurational and learning schools. Mintzberg et al (1998, p. 352) argue that this reflects a greater focus from academics on "types of strategy processes and stages in strategic development, while practitioners in many quarters have become almost obsessed with strategic transformation." There is also evident a stronger appreciation of concepts such as the "learning organization" (Senge, 1990) and "core competence" (Prahalad and Hamel, 1990). Table 1 sets out the key elements of the Mintzberg (1990), Mintzberg et al (1998) and Mintzberg and Lampel (1999) classification of the literature.

Table 1-Representative Vocabulary, Central Actor(s), and Basic Process from Mintzberg (1990), Mintzberg, Ahlstrand and Lampel (1998), and Mintzberg and Lampel's (1999) Planning Schools

School	***Vocabulary***	***Central Actor(s)***	***Basic process***
Prescriptive			

Design	congruence/fit, distinctive, competence, competitive advantage, formulation/ implementation, strengths, weaknesses, opportunities, threats,	chief executive (“architect”)	cerebral, simple and informal, judgemental, deliberate,
Planning	programming, budgeting, scheduling, scenarios	planners	formal decomposed deliberate
Positioning	industry and competitive analysis, generic strategy, strategic group, portfolio, experience curve	analysts	analytical, systematic, deliberate

School (continued)	***Vocabulary***	***Central Actor(s)***	***Basic process***
Descriptive			
Entrepreneurial	bold stroke, vision, insight	leader	visionary, intuitive, largely deliberate

Cognitive	map, frame, concept, schema, perception, interpretation, bounded, rationality, cognitive style	brain	mental, emergent, overwhelming, constrained
Learning	incrementalism (disjointed or logical), emergent strategy, sense making, venturing, entrepreneurship, core competence, champion	whoever can learn	emergent, informal, messy,
Political/Power	bargaining, stakeholders, conflict, coalition, network, stakeholders, political game, collective strategy, alliance	whoever has power (micro) whole organisation (macro)	conflictive, aggressive, messy, emergent (micro), deliberate (macro)
Cultural	values, beliefs, myth, culture, ideology, symbolism	collectivity	ideological, constrained, collective, deliberate

School	***Vocabulary***	***Central Actor(s)***	***Basic process***
Descriptive			

(continued)			
Environmental	adaptation, evolution, contingency, selection, complexity, niche	environment	passive, imposed, emergent
Integrative			
Configurational	configuration, archetype, period, stage, life cycle, revitalisation, strategic, revolution, turnaround	all those above, in context	integrative, episodic, sequenced, plus all of those above, in context (deliberate for configurations, deliberate and prescriptive for transformations)

Equipped with this background in Mintzberg's planning schools we are now in a position to better appreciate the lessons learned from the evolution of the strategy paradigm since World War II. A discussion of these lessons provides a solid foundation for, and is a necessary step to, preparation of an effective conceptualisation of strategic thinking in a later working paper.

Firstly, we have seen that there are a number of demands upon the organisation in the 1990s that can only be addressed by the evolution of the strategy process into one that is more flexible and adaptable. These demands include the high level of uncertainty confronting organisations in the environment (Prahalad and Hamel, 1994), ongoing problems in improving strategy implementation (Wilson, 1994; Stacey, 1993; Bonn and Christodolou, 1996), and the growing importance of organisational culture and internal politics in actioning effective strategy (Wilson, 1994). Strategic planning in the 1970s and the strategic management process in the 1980s have proven to be unable to meet these demands (Stacey, 1993) resulting in this evolution of the paradigm (Wall and Wall, 1995; Heracleous, 1998). In the 1990s there is greater emphasis on strategy as a social interactive process and on decision making at the individual and organisational level. Strategy is now an inclusive process. Staff at all levels of the firm (ie. the board, the CEO, top managers, internal consultants, line managers) (Liedtka, 1998a; Lorange, 1998) and certain external shareholders (ie. external consultants, suppliers, creditors, equity investors, lenders) can be involved in strategic thinking to assist facilitation of strategy implementation by gaining their ongoing input and commitment to the strategy process (Wilson, 1994; Stacey, 1993; Wall and Wall, 1995; Bonn and Christodolou, 1996; Raimond, 1996). Line staff especially can play a key role in conducting "boundary spanning", providing the firm with a valuable insight into market and customer trends (Liedtka, 1998b; Lorange, 1998) which is vital to strategic success (Wilson, 1994).

Secondly, it is evident from the strategy literature that the strategic management process provides an acceptable framework for strategic thinking (Wilson, 1994). The strategic situation confronted by the firm is unique, ambiguous, paradoxical (Stacey, 1993) and presents varying levels of uncertainty dependent on the contextual environment (Boisot, 1995). In a stable and predictable contextual environment a western, left brain, analytical, convergent approach to strategic thinking within the strategic management framework is possible (Boisot, 1995). Higher levels of uncertainty provide a challenge for managers in that during their day-to-day activities they must decide when to embrace and when to step away from the firm's accepted frameworks, customs, rules and procedures to address strategic situations. In this context strategic thinking needs to resemble the eastern, right brain, creative, intuitive, divergent behaviour commonly seen in the arts (Stacey, 1993). Schon (1987) refers to this as "reflection-in-action" and Hamel (1996) to "strategy as revolution". This can be developed as an internal capability of the firm and addressed in the context of the McKinsey "7-S Model" (Peters and Waterman, 1982, p.10) through an appropriate blend of "hard" (ie. strategy, structure, systems) and "soft" (shared values, leadership style, staff, skills) factors. In this way the board, the CEO and top management team can retain responsibility for autonomous business units and line managers.

Thirdly, what may be deemed an appropriate level of depth of strategic thought and balance in the use of intuition and analysis for one firm and/or one manager in a particular situation is not necessarily appropriate for another firm or manager in a different situation. Heracleous (1998) makes a pertinent observation here arguing that strategic thinking and strategic planning are both necessary and neither is sufficient without the other. Flexible approaches to strategic thinking can assist in achieving improved strategic planning. Raimond (1996), Wilson (1998) and Liedtka (1998a) also emphasise the importance of balancing intuition and analysis. There is no single formula for success with strategic thinking and an approach which works for one firm or manager may be ineffective for another.

Fourthly, reflecting this modern insight, many firms have now inverted the organisation chart and placed the customer at the very top. Organisations now encourage personal risk-taking and individual responsibility in thought and action from line staff (Hamel and Prahalad, 1994). Organisational flexibility needs to be built into the firm so that it may adapt and respond to change (Tushman and O'Reilly III, 1997). In this context cross-functional teams are playing a greater role in the strategy process (Wall and Wall, 1995). Thought and action take place sequentially (Isenberg, 1984: Luehrman, 1998) or concurrently in this context depending on the demands of the situation, with the board and top management providing the supporting internal environment to allow this level of autonomy (Stacey, 1993). Staff selection and training are key in this context. The new generation of better trained "knowledge workers" are well equipped to accommodate, and in fact demand, greater autonomy. Management time is also optimised through delegation (Wall and Wall, 1995). Strategy emerges through a constant process of iteration (Liedtka and Rosemblum, 1996; Christensen, 1997) balancing intuition and analysis (Raimond, 1996; Liedtka, 1998a).

Fifth, Stacey (1993) has observed that conflict can result within firms as a result of encouraging this creative, intuitive, divergent approach to addressing strategic problems. As a consequence strategic thinking needs to take into account organisation culture and politics as well as group behaviour to better understand the organisational processes at work. It is evident from the evolution of the paradigm that managers and organisations need to draw on a wide variety of fields such as cognitive psychology, systems theory, contingency theory, group dynamics and the concept of the learning organisation to facilitate effective strategic thinking. This observation flows in part from Mintzberg's contribution to the field in the 1970s, particularly with respect to intended and emergent strategy. Senge (1990) and his work on the “learning organisation” has developed this further.

Sixth, communications, computing and knowledge technologies have grown exponentially in recent years. Convergence of these technologies at the same time is also a major development. Growth and convergence of these technologies now allow firm’s to overcome previous strategy constraints on time, location and form (Ferguson, 1996). Availability of data, flexibility of access to data, utilisation of decision support systems to encourage and enhance the use of intuition and analysis, and also facilitate staff training (Sauter, 1999) serves to undermine Mintzberg’s (1994) position on the timeliness and use of hard data. Technology can facilitate and enhance communication and strategic thinking allowing a strategy process which is more fluid (Wall and Wall, 1995).

CONCLUSION

Given there is now a wider range of subject matter relevant to the strategy paradigm there is clearly evident a stronger appreciation of Mintzberg’s (1990) descriptive and integrative schools. Wall and Wall (1995, p. 8) sum up well in observing:

> “The changes under way reflect less a conscious effort than a natural evolution, part of the adaptation to external conditions that organizations make in order to survive…(strategy) is evolving due to the increasingly urgent need for responsiveness to market changes - a need that has also contributed to the flattening of hierarchies. This elimination of layers of management, in turn, affects the way in which organizational strategies are created.”

Communication and strategic conversations are increasingly important. Managers are drawing on an array of skills and techniques to cope with environmental change and complexity. Strategic thinking must accommodate this need for flexibility.

The picture remains far from complete. Insight from the evolution of the strategy paradigm provides a valuable, but only a part of the input needed to effectively conceptualise strategic thinking as it needs to be practiced by modern corporations. Regardless the lessons learned from the evolution of the field emphasise the greater importance of the line manager in managing an uncertain environment. All staff have need for an awareness of the strategic management framework which provides sufficient flexibility to accommodate strategic thinking. Internal and external stakeholders will have individual preferences in the use of intuitive and analytical thought processes in their day to day work and this needs to be accommodated by the firm in the effective development of the strategic thinking capability. Individual staff training and experience will need to take into account the need for appropriate cognitive maps and supplementation of on the job experience using information technology to encourage effective strategic thinking. Organisational culture, organisational politics, organisational learning and group dynamics are assuming increasing importance as the involvement and interaction of internal and external stakeholders in the strategy process becomes increasingly important.

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