



## **Strategic Decision Making: Opportunities for Research**

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## **Abstract**

This paper reviews the literature relating to Strategic Decision Making (SDM) processes. It considers what strategic decisions are, what the characteristics of good SDM processes are, and what the various inputs into SDM processes are thought to be. It draws together a model of SDM processes which indicates the complexity and highly contextual nature of these processes.

The literature suggests that not enough has been done to establish how managers actually do make decisions, particularly given the complexity and uncertainty with which they are typically presented.

Finally, some opportunities for research in the field are presented.

# Strategic Decision Making: Opportunities for Research

## 1. Strategic Decision Making Defined

Mintzberg, Raisinghani and Theoret (1976) define a strategic decision as one which is “important, in terms of the actions taken, the resources committed, or the precedents set” (p246). Quinn (1980) suggests that these decisions determine the overall direction of the firm. In line with this, Eisenhardt (1989) defines strategic decisions as those which: “(1) involve strategic positioning, (2) have high stakes, (3) involve many of the firm’s functions, and, (4) [can] be considered representative of the process by which major decisions are made at the firm.”(p546)

Eisenhardt and Zbaracki (1992) add that strategic decisions are “those infrequent decisions made by the top leaders of an organization that critically affect organizational health and survival”. (p17)

Other authors note in addition that decisions which are strategic in one industry may not be so in another (Hickson, Butler, Cray, Mallory and Wilson, 1986). However, Dean and Sharfman (1996) note that in their research, managers had no trouble in identifying strategic decisions.

By implication, strategic decisions are complex, and involve a high degree of uncertainty. Their occurrence and type may be contingent on a wide variety of factors, including the external and the internal environments of the organisations in which they are made. Given these observations about the nature and importance of strategic decisions, it follows that their study is a matter of some significance to managers.

## 2. Characteristics of Good SDM Processes

The characteristics of good SDM processes have been widely considered. Comprehensive-ness of decision process is widely identified as a central feature of good decision making, and is associated with rationality of approach (Fredrickson and Mitchell, 1984). Comprehensiveness refers to the extent to which a thorough search for options has been undertaken, and those options reviewed for their relative merit before one is chosen.

Significant and positive links between comprehensiveness of strategic decision process and performance is established in meta-analyses of the planning – performance literature by Miller and Cardinal (1994) and Schwenk and Schrader (1993). These analyses, however, compare many different studies, which are based on differing constructs, methodological approaches, and firms and environments. They note considerable variance between studies in the size of the effects, and suggest that factors in the business environment may be responsible for these.

Table 1 summarises the characteristics of good decision processes identified in the literature, and outlines results from empirical studies. It indicates the level of debate and uncertainty regarding when comprehensiveness might be appropriate or inappropriate.

**Table 1: Characteristics of Decision Making Processes**

<b>Characteristic</b>	<b>Key Points</b>	<b>Key References</b>
Comprehensiveness	A measure of rationality which refers to the extent to which organisations attempt to be exhaustive or inclusive in the making or integrating of decisions	Fredrickson & Mitchell (1984)
	Defined as extensiveness of decision process relating to short-term opportunities and threats.	Miller & Toulouse (1986) Priem, Rasheed and Kotulic (1995) Miller, Burke & Glick (1998)
	Positive for firms in stable industries; harmful for firms in turbulent industries	Fredrickson & Mitchell (1984)
	Positive effects for firms in turbulent industries	Bourgeois & Eisenhardt (1988) Miller & Toulouse (1986) Priem, Rasheed & Kotulic (1995)
	Positive effects for firms in stable industries	Dean & Sharfman (1996)
Extensiveness	Defined as extensiveness of decision process relating to long-term opportunities and threats	Miller, Burke & Glick (1998)
	Long term planning has positive effects, particularly in turbulent industries	Boyd (1991) Miller & Cardinal (1994)
Speed	Fast decision making leads to better performance in high velocity environments	Eisenhardt (1989)

The literature indicates a dichotomy between short term (comprehensive) and long term (extensive) decision horizons. Recent writing in the strategy arena may contribute to a deeper understanding of this problem (for instance Levy, 1994, Stacey, 1995). Stacey (1995) proposes that the science of complexity may offer greater insight into the mechanisms through which strategies emerge than more traditional views. Complexity theory suggests that organisations are systems which operate with complex negative and positive feedback loops. Long term outcomes are difficult to predict, as they are the result of the entire history of an organisation, not of a single action or decision. Tiny, undetectable actions can escalate into major outcomes. Thus short term decisions need to be made within longer term guidelines or intentions. This idea is particularly relevant in highly turbulent or highly uncertain environments.

Hamel and Prahalad's (1989) suggestion that firms should establish "strategic intent" - an ambitious competitive objective, which provides vision and informs the decision making of the entire firm over time - seems to be in line with these ideas. Similarly, Eisenhardt and Tabrizi (1995) note a contrast between "punctuated equilibrium, which characterizes adaptation in terms of large, infrequent structural changes" and adaptation which "can also occur through small, frequent shifts in how firms compete in the marketplace" (p106). Eisenhardt (1997) also suggests that "improvisation", as in jazz or drama, is a relevant metaphor to describe the tension between short term and long term decisions. The musicians (in the case of jazz improvisation) innovate within the guidelines of a few clear rules. The result is both innovative and uncertain on the one hand, and highly musical on the other.

The uncertainty described by complexity theory and associated ideas is linked to the SDM literature by various authors, including Stacey (1995) and Eisenhardt (1989). Stacey (1995) asks "how do/should managers conduct themselves in the presence of irremovable, indeed desirable, uncertainty, surprise, unknowability, and open-endedness?" (p. 491). Eisenhardt's (1989) study in a high velocity environment seeks to establish how managers maintain rationality in decision making processes in the face of uncertainty and rapid, discontinuous change: "How do decision makers overcome anxiety and gain the confidence to decide?... How do decision makers maintain decision quality while moving quickly?" (p. 545). The paper deconstructs the process as a whole to establish how its elements induce speed and thoroughness together.

Eisenhardt (1989) found that managers in successful firms employed various tactics to achieve comprehensiveness of decision process. They used experienced counsellors for advice, they sought many alternatives, they speeded their cognition processes by evaluating many sorts of information frequently, they tied strategic decisions into operating plans. In highly dynamic environments, these tactics serve to speed decision processes as well as rendering them comprehensive.

One of her conclusions, that "interesting research questions center on problem solving strategies" (p573) is subsequently echoed in Eisenhardt and Zbaracki (1992), where the call for research into the heuristics employed in SDM is more fully articulated. McFadzean and Money (1995) focus on this matter, looking at technical, rather than political approaches to problem solving.

The literature suggests, therefore, that good decision processes are described as comprehensive or extensive, referring to the range of options considered either in the short term or the long term. In some environments, decisions must be made quickly, and complexity theory suggests that short term decisions may need to be made within the context of longer term rules, objectives, or guidelines. The literature also suggests that the ways in which managers cope with or address complexity - presumably in order to make good decisions - is an interesting subject for further study.

### **3. Paradigms in Strategic Decision Making**

Eisenhardt and Zbaracki (1992) note three paradigms which attempt to describe the nature of strategic decision making: rationality or bounded rationality; politics and power; garbage can. Each of these was explored over the preceding period of 15-20 years in the strategy literature; each was presented as a definitive model for describing the nature of SDM processes. The authors review the empirical support for each theory, concluding that several main contentions have enough empirical support that they can be agreed, namely:

- ◆ decision makers are rational or boundedly rational
- ◆ decision making is a political process in which the powerful get their way
- ◆ decision makers play politics
- ◆ the garbage can model (though limited in its empirical support) offers an important signal - that chance is important.

Hardy (1992) notes that each of the main paradigms has been used in attempting to understand the University context. Each paradigm assumes a different model of organisation. Her work is shown in Table 2.

**Table 2: Decision Making Paradigms and Organisational Models of the University**

<b>Paradigm</b>	<b>Organisational Model</b>	<b>Key Authors</b>
Rational / Bounded rational	Bureaucratic structure, ensuring extensive analysis of problems and opportunities	Chaffee (1983) Hardy (1988) Baldrige (1971) Birnbaum (1988)
Political	Community of scholars working toward consensus for the common good	Baldrige (1971) Chaffee (1983) Pfeffer, Salancik & Leblebic (1976)
Garbage can	Organised anarchies, where behaviour is not purposeful, and chance is important	Cohen & March (1974) March & Olsen (1976)
Source: Hardy (1992)		

The 'garbage can' model is particularly relevant to the University context, as March and Olsen (1976) suggested. In this model, the uncertainty of objectives, and the difficulty encountered in formulating problems is compounded by the large number of views available on any given problem, and the erratic way in which these might be revealed. Long time horizons exacerbate the problem.

Hardy's (1992) own choice in analysing the retrenchment strategies in two Canadian Universities is to use a political framework, as the need for retrenchment causes conflict between collegial groups, which is subsequently resolved through the use of power. As the retrenchment was enforced by government policy within certain time constraints, the garbage can model did not come into play as it might have had the process been less constrained by external forces.

Hardy (1991) offers a helpful analysis of power, derived through her studies of University decision making processes. In her view,

“power can be mobilized for the benefit of the common interest as well as self-interest, and ...it is used to prevent conflict as well as to prevail in the face of it. In other words, power is not simply power over another individual or group. It is also a capacity or facility to achieve a collaborative outcome.” (p139)

Thus as an input into SDM processes, it can be used positively as well as negatively, it can resolve problems as well as create them. The “politic manager” (p.139) is an effective manager.

Eisenhardt and Bourgeois (1988) identify the importance of power and conflict, and propose a critical link between centralisation of power and the appearance of politics in an organisation. While the authors accepted that “all strategic decision processes are ultimately political” (p737), they defined politics as “the observable, but often covert, actions by which executives enhance their power to influence a decision” (p737-738). In organisations which they studied in depth, politics were negatively linked with performance. Using quite different quantitative methods across a larger sample group, Dean and Sharfman (1996) evaluated Strategic Decision Effectiveness in 24 firms, looking at 61 decisions, and similarly found that political behaviour was negatively related to effectiveness.

Eisenhardt and Zbaracki’s (1992) conclusion that the different paradigms all have some validity and co-exist seems to be supported by Hardy’s (1992) research into Universities. Eisenhardt and Zbaracki (1992) also establish a future research agenda which would move away from paradigmatic debates and take a more pragmatic view of strategic decision making. This would address the various means by which managers actually achieve decisions, and has three main areas of concern:

- ◆ cognition
- ◆ normative implications
- ◆ conflict.

In the area of cognition, Eisenhardt and Zbaracki suggest that researchers might consider the heuristics which strategic decision makers use; the nature, use and limitations of insight; and the development and use of intuition. In the area of normative implications, they argue for explorations of the effectiveness of rationality and use of power, for identification of the organisational or cultural contingencies which affect their use, and for research designed to illustrate how to improve various aspects of decision making. Finally, given that conflict appears again and again in the decision making literature, research into its effects, and how to manage and reduce it, are suggested.

Goll and Rasheed (1997) note that the argument over which paradigm (rational, political, garbage can) most accurately describes decision making, has given way “to a focus on the context specificity of the rationality-performance relationship” (p. 583). The next sections of this review consider various strands of investigation into this relationship.

#### 4. Decision Makers and Decision Making Processes

So far, the literature reviewed has identified the nature of strategic decisions, characteristics of good decision making processes, and paradigms in strategic decision making. This section will consider the role of individuals and groups in SDM processes.

Hambrick and Mason's (1984) paper on upper echelons opened up a stream of literature examining the make-up of top management teams. They argued that if decision making is a process, and process is affected by behavioural factors, then the behaviour of senior managers is important to understanding the SDM process; and behaviour is at least in part derived from the characteristics of the individuals at the top of the organisation. In keeping with the view that strategic decisions are made by the firm's most senior managers, many authors (for instance, Eisenhardt (1989), Smith, Smith, Olian, Sims, and O'Bannon (1994), Papadakis and Barwise (1995) and Miller Burke and Glick (1998)) explore the actions and composition of top managers and management teams, and the effects of these on strategic decisions.

The influence on decision making of cognitive diversity (Miller *et al*, 1998), and demographic diversity (Smith *et al*, 1994) in the top team have been examined. Conclusions from both studies suggest that diversity of individual characteristics of members of the team may require a process which enables them to integrate effectively. Thus in Smith *et al* (1994), some aspects of heterogeneity had a negative impact on performance, and it is suggested that team building activities in some circumstances might have substantial pay-offs for the firm. Similarly, Miller *et al* (1998) identify a negative influence of cognitive diversity over comprehensiveness and extensiveness, and suggest that the management of diversity needs further research. Papadakis and Barwise (1995) examined both demographic and cognitive characteristics of CEOs and Top Management Teams. They found that decision process was strongly influenced by the team make-up, but not by the individual CEOs. Thus it is the teams themselves that seem to be linked to performance, rather than the individuals.

Conflict in team processes is discussed by many authors (for instance, Amason, 1996 and Eisenhardt, 1997). Amason (1996) notes the importance of team heterogeneity for decision making processes, and suggests that both cognitive characteristics and team processes influence the SDM process, and that types of conflict influence decision quality. He identifies affective conflict (which is dysfunctional and has a negative effect on decision quality) and cognitive conflict (which is functional has a positive effect on decision quality), and notes that well managed team processes are likely to result in better decisions, with less affective conflict. In a similar vein, Eisenhardt, Kahwajy and Bourgeois (1997) equate "substantive", "issue-oriented" and "cognitive" conflict, and describe the importance of conflict in extracting comprehensive and extensive decision processes. Eisenhardt *et al* (1997) conclude that conflict "reflects a continuously evolving understanding of the world that is gained through interaction with others around alternative viewpoints" (p60).

Lawrence (1991) notes that demographic studies have a key shortcoming: they substitute input characteristics for process. They collect demographic information about management and try to establish causal relationships directly with outcomes, thus ignoring the 'black box' of the interactions between managers, systems, and the environment. Pettigrew (1992) attributes the conflicting and uncertain findings of these studies to this problem, critiquing in addition the shortcomings of the correlational methodologies employed. He builds on this criticism, noting that the

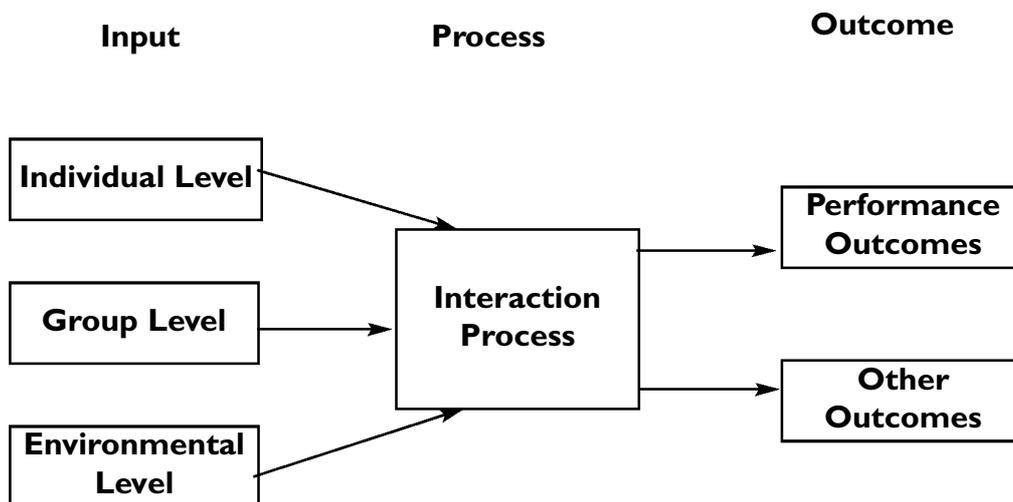
"damning indictment of the demography-based top management team research is that no-one has ever been anywhere near a top team in an

organisational setting either to directly observe a team in action, or to interview the members about the links between their characteristics and structure, processes of communication and decision making and their impact and performance.” (p175)

Pettigrew completes his critique by calling for more contextualised approaches to research to be employed in the field. These alternative methodologies would consider the wider range of influences in a more holistic manner. Pettigrew (1992) also notes that even difficulties of access to senior managers can be overcome, citing Eisenhardt (1989) Eisenhardt and Schoonhoven (1990) and Pettigrew and Whipp (1991) as good examples in the field.

Higgs (1997) investigates these matters with a more complex model, using demographic, process, and outcomes characteristics of working teams to try to establish relationships between inputs, process and outcomes. This work builds on the proposed models of McGrath (1964) and Hackman and Morris (1975). The McGrath (1964) model is shown at Figure 1.

**Figure 1: McGrath (1964) Iteration Process Model**



Higgs’ work takes a more holistic view than those attempting to link demographic characteristics of individuals with performance. It lends support to the view that process is an intervening variable between individual characteristics (inputs) and outcomes. It also looks at teams, rather than individuals. However, it also has limitations, resulting from the correlational analysis, and the necessarily limited number of factors used to enable the model to be analysed with multivariate statistics.

Dean and Sharfman (1996) collected data on 61 decisions, using interviews with senior managers to investigate the effectiveness of SDM process. Their conclusion was that “decision processes influence the strategic choices managers make, which in turn influence the outcomes affecting a firm” (p389). They also note that “managers who collected information and used analytical techniques made decisions that were more effective than those who did not. Those who engaged in the use of power or pushed hidden agendas were less effective than those who did not” (p 389). They note that their study, despite using quite a different methodology, shows “that some of the findings of Eisenhardt and Bourgeois (1988) and Bourgeois and Eisenhardt (1988), extend beyond unstable environments to include stable ones as well” (p389).

In keeping with Pettigrew (1992), Dean and Sharfman (1996) suggest that future research might include “more complex conceptualizations of decision making, implementation, and environmental effects. Formulating these would probably require conducting case study research, so as to disentangle the complex strands of influence on decision effectiveness in any setting” (p 391).

Approaching the field from a different perspective, McFadzean and Money (1994) evaluated the literature on Strategic Problem Solving, and also concluded that a holistic view of strategic problem solving is needed. Their concluding framework draws together the many inputs to problem solving and decision making processes: “decision making processes can be affected by the type of problem to be solved as well as individual, group and organisational characteristics” (p19). These inputs can be addressed in many ways, as appropriate: “decision makers may need to use problem solving tools such as conceptual maps, creative problem solving techniques and/or decision analysis tools. The type(s) or tools needed will depend on the complexity and severity of the problem.” (p18)

By identifying the enormous variety of inputs and therefore problems to be solved on the one hand, and the complexity of many problems on the other, the paper notes the essentially contingent nature of the choices which managers make in developing their decision making processes. However, by looking at process only in terms of the technical approaches which managers use to solve problems and treating all other processes as input characteristics, it does little to advance our understanding of strategic decision processes.

The literature suggests, therefore, that process is important. The literature on top team demographics which resulted from Hambrick and Mason’s (1984) paper has been inconclusive about the influence of demographics on decision making. Pettigrew’s (1992) scathing criticism of the demographic approach for substituting inputs for process is a compelling argument against the approach. Dean and Sharfman (1996) follow Pettigrew (1992) and Eisenhardt and Zbaracki (1992) in calling for contextualised research examining SDM processes in situ.

## 5. The Business Environment and Decision Making

The business environment is identified as a key contingent factor in SDM processes by a variety of authors (for instance, Mintzberg (1979), Castrogiovanni (1991). That the business environment is a multi-dimensional construct (including dynamism, stability, complexity, velocity and munificence) is identified by Mintzberg (1979) Goll and Rasheed (1997) and Castrogiovanni (1991). Environmental factors are seen as moderating decision effectiveness by Goll and Rasheed (1997), Dean and Sharfman (1996) and McGrath (1964).

Mintzberg (1979) identified four main dimensions in the environment, each having a continuum between polar opposites:

- ◆ **Stability:** ranging from stable to dynamic
- ◆ **Complexity:** ranging from simple to complex
- ◆ **Market diversity:** ranging from integrated to diversified
- ◆ **Hostility:** ranging from munificent to hostile.

However, the definition and operationalisation of constructs in this area are incomplete. Castrogiovanni's (1991) review of the literature on munificence highlights the lack of precision in the area. Here, Table 3 identifies some of the constructs relating to dimensions of the environment, and gives an indication of the uncertainty surrounding them.

**Table 3: Descriptors of the Business Environment**

<b>Descriptor</b>	<b>Definition</b>	<b>Reference</b>
Dynamism	Used interchangeably with Uncertainty	Goll & Rasheed (1997)
	Opposed to stability on a continuum	Mintzberg (1979)
Stability	Opposed to dynamism	Mintzberg (1979) Goll & Rasheed (1997)
Complexity	Numerous, interconnected, environmental elements are relevant	Dess & Beard (1984)
	Measure of the extent to which the environment requires the organisation to have a great deal of sophisticated knowledge about products, customers, or whatever	Mintzberg (1979)
Velocity	A measure of speed of change and continuity in demand, competition, and technology. In high velocity environments, changes are so rapid and discontinuous that information is often inaccurate, unavailable, or obsolete	Bourgeois & Eisenhardt (1988)
Munificence	Scarcity or abundance of critical resources needed by firms operating within an environment	Castrogiovanni (1991)
	Opposite to Hostility on a continuum.	Mintzberg (1979)
	Influenced by the organisation's relationships with ...outside groups, as well as by the availability of resources to it	
Hostility	Opposite to munificence on a continuum	Mintzberg (1979)
Uncertainty	Rate of change	Rajagopalan, Rasheed and Datta (1993)
Scarcity	Opposite to munificence on a continuum	Staw and Sz wajkowski (1975)

Just as the constructs and their definitions are not fully agreed, it is also not agreed how they influence strategic decision processes and performance. Dean and Sharfman (1996) suggest that environmental instability influences decision process. Eisenhardt (1989) and Bourgeois and Eisenhardt (1988) suggest that particular environments require particular approaches to strategic decision making. Rajagopalan and Datta (1996) examine the fit between industry and CEO characteristics, and conclude that “industry factors might be less salient than firm-specific factors in explaining variations in CEO characteristics”.

For researchers, one way of controlling for environmental variations and uncertainty of construct is to structure research programmes around firms operating in a common environment. Eisenhardt (1989) studies firms within a single environment type – high velocity – and thereby excludes the effects of environmental factors in her study. Her study examined firm processes, then compared firm performance, identifying a range of performance quality which could be linked directly to decision making approaches. Similarly Rajagopalan and Datta (1996) examined undiversified firms, in order to control for varying environmental factors that might have an impact on Strategic Decision Processes. Their research agenda then calls for complementary work in larger, diversified firms.

## **6. Strategic Decision Making: Conclusions**

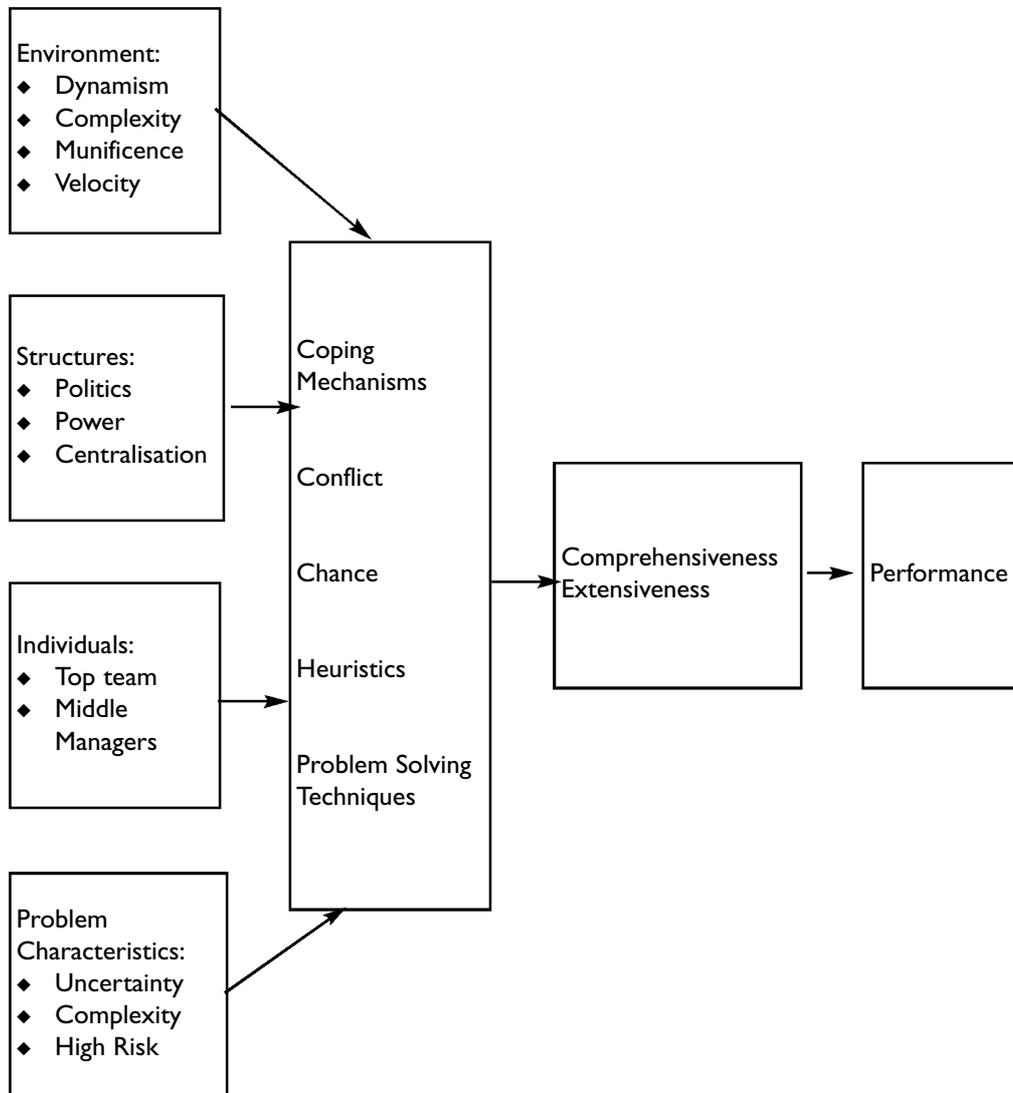
Strategic Decisions are important decisions regarding the future of the firm (Mintzberg, Raisinghani and Theoret, 1979). Theory in the area of SDM processes is largely focused on the need for comprehensiveness and the difficulties in achieving it. Barriers to thorough decision making process include limited cognitive capabilities of managers, process difficulties, and the complexity and uncertainty of both the present and the future. The various inputs to SDM processes appear to have a variety of effects, depending on the specific context in which they are found. Rationality operates alongside politics, power and chance, and indeed may be achieved through the use of political skills by managers (Eisenhardt and Zbaracki, 1992; Hardy, 1991).

Environmental factors are thought to be important inputs to SDM processes, but the constructs underpinning environmental factors are open to debate and redefinition, and the precise roles of environmental factors in SDM processes are still uncertain (Castrogiovanni, 1991; Dean and Sharfman, 1996). Complexity theory, and difficulties of predicting the outcomes of short term decisions in the long run contribute further to the debate. The concepts of comprehensiveness and extensiveness may need to be re-examined in the light of complexity theory (Stacey, 1995). However, it is suggested that these characteristics of good decision making processes can be maintained in the face of high levels of uncertainty and environmental change (Eisenhardt, 1989).

The findings of this literature review can be modelled into an overview of the decision making process (Figure 2).

Theory specifically about how managers overcome uncertainty to decide, and how they maintain decision quality, is still limited. Bourgeois and Eisenhardt (1988), Eisenhardt (1989), and Eisenhardt and Bourgeois (1988) provide tentative propositions (included at Appendix 1); but these appear still to be largely untried. Together they cover many different aspects of SDM processes, including comprehensiveness, the use of power and politics, the development of intuition and cognition, the management of teams and the difficulties of overcoming uncertainty. Their case studies were all found in a single, turbulent industry, where changes in competition are so fast and substantial that they create major gaps in

**Figure 2: A model of influences on Strategic Decision Making Processes**



information and high levels of uncertainty. The authors limit the generalisability of some of the propositions to such turbulent industries.

The process of Strategic Decision Making among senior managers remains, therefore, an area of importance which is under-researched. As Pettigrew (1992) points out:

“We still know little about why and how top teams and other groupings look the way they do, the processes by which top teams go about their tasks, how CEOs engage with their subordinates, and how, why, and when the upper echelons engage in fundamental processes of problem sensing, decision making, learning, and change.” (p178)

The importance of the field, the complexity which it entails, and the limitations of the research already conducted, all imply that there are significant opportunities to develop research programmes in the area.

## 7. Opportunities for Research

Using our model of SDM processes, research could investigate the relationships between certain or all elements, or it could investigate particular areas of the field. The complexity alluded to by Dean and Sharfman (1996) and others implies that either complex computer modelling would be required to look at a large sample group of SDM processes or decision makers or, alternatively, a rich picture developed of fewer examples. The former approach was taken by Higgs (1997), but faced with the volume of possible constructs and relationships to measure, he necessarily selected only a few. The case study approach would help to identify and disentangle the many threads, but repeated case studies, taking a similar approach, might have to be examined in order to identify generalisable laws or relationships.

The literature also makes numerous calls for contextualised research into the ways in which managers actually do make decisions. While Pettigrew (1992) calls for contextualised research investigating the range of influences on senior managers more holistically, Eisenhardt and Zbaracki (1992) call for contextualised research into cognition and conflict. Dean and Sharfman (1996) also call for further case study investigations:

“so as to disentangle the complex strands of influence on decision effectiveness in any setting. Such research would be less suited to demonstrating empirically that these variables have an effect, but better suited to explaining how their influences play out.” (p391)

There are several important factors which cross these and other calls for research in the field. They encompass SDM processes as a whole, as well as specific inputs to decision processes. They also focus on the fact that SDM is the domain of managers – people with substantial responsibility for the future of the firm and only limited cognition. Table 4 draws together the various research questions and fields of study identified in this review.

Along with the process model of Figure 2, this research agenda identifies complexity and context as critical aspects of possible research in the field. The implication for researchers may be that it is not yet time to examine SDM processes in isolation from their context. Examination of processes for commonality across widely differing environments or organisational contexts may still present a level of difficulty which will undermine the value of any results. A more holistic approach, examining perhaps case studies in Strategic Decision Making might more effectively identify and disentangle some of the complexity.

Although some authors have alluded to Eisenhardt’s and Bourgeois’ various findings (for instance Dean and Sharfman, 1996), this author has found no example of research specifically setting out to test these, either by replication of their approaches in another setting, or through cross-sectional research. There is, therefore, scope for either of these approaches to be pursued. One possible avenue for future research would be to repeat their case based research programme, but in very different industries. This could provide triangulated evidence to support (or undermine) their theoretical proposals. These could then be examined with greater confidence through larger scale and cross sectional samples.

**Table 4: Research questions and areas for investigation identified in the literature review**

<b>Author</b>	<b>Research Question or Area for Investigation</b>
Hambrick & Mason (1984)	Makeup of top management teams
Eisenhardt (1989)	<p>“how do decision makers overcome anxiety and gain the confidence to decide?...How do decision makers maintain decision quality while moving quickly?” (p.545)</p> <p>“interesting research questions center on problem solving strategies.” (p573)</p>
Eisenhardt & Zbaracki (1992)	<p>Calls for research into:</p> <ul style="list-style-type: none"> <li>◆ the heuristics employed in SDM; nature, use and limitations of insight; development and use of intuition.</li> <li>◆ the effectiveness of rationality and use of power, identification of the organisational or cultural contingencies which affect their use, research designed to illustrate how to improve various aspects of decision making.</li> <li>◆ the effect of conflict, and how to manage it and reduce it.</li> </ul>
Pettigrew (1992)	More contextualised approaches to research should be employed, which would consider the wider range of influences in a more holistic manner.
Rajagopalan & Datta (1996)	Complementary work in larger and diversified firms to investigate environment influences
Dean & Sharfman (1996)	“More complex conceptualizations of decision making, implementation, and environmental effects ...case study research ...to disentangle the complex strands of influence on decision effectiveness in any setting.” (p.391)
Miller et al (1998)	Management of diversity needs further research

Some of Eisenhardt’s (1989), Eisenhardt and Bourgeois’ (1988) and Bourgeois and Eisenhardt’s (1988) proposals link decision making process with firm performance. The nature of the business environment under study meant that this was a feasible part of the research programme. Firms entered and exited the relevant markets very quickly, and their successes and failures became obvious very quickly. Not all environments show results so rapidly and, in addition, measuring success is not itself as easy as it might be in an organisation with clear profit making goals. This need not preclude researchers from examining SDM process in such industries. Process complexity means that there are many areas to explore and disentangle within an SDM case before making the connection to performance.

Calls for research ask repeatedly for a holistic approach, and for examination of SDM processes within their context in the first instance. A purely positivist approach, by

examining specific hypotheses only, might fail to identify important aspects of the problem. Advances in computer modelling systems mean that sophisticated models can be tested with greater ease than previously, but it is not yet entirely clear what propositions should be tested. Case based research, however, would seem to be an appropriate vehicle for disentangling the complex threads of the problem area. This would help to clarify new hypotheses for examination.

The need for research in the field is, therefore, well established. Senior managers carry enormous responsibility for the performance of their organisations, and finding ways of improving their performance must be an important area for research and development. Developmental programmes for managers need to be based on theory developed through research which addresses the problem of Strategic Decision Making holistically. The complexity of the problem opens up numerous opportunities for research in organisations of all sorts. The challenge – and opportunity – is to identify and carry out research programmes leading to robust and generalisable theory in the field.

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## Appendix 1



## **Propositions arising from Bourgeois and Eisenhardt (1988), Eisenhardt and Bourgeois (1989) and Eisenhardt (1989).**

**Summary of Propositions and Hypotheses from ‘Strategic Decision Processes in High Velocity Environments: Four Cases in the Microcomputer Industry’, L.J. Bourgeois and Kathleen M. Eisenhardt, *Management Science*, Vol 34, No 7, July 1988**

- P1: In high velocity environments, effective firms use rational decision making processes.
- 1.1: In high velocity environments the more analytic the strategic decision making process, the better the performance of the firm.
- 1.2: In high velocity environments, the more comprehensive the search for strategic alternatives, the better the performance of the firm.
- 1.3: In high velocity environments, the clearer and more explicitly articulated the institutional goal, the better the performance of the firm.
- P2: In high velocity environments, effective firms try new things.
- 2.1: In high velocity environments, the more innovative and risky the set of strategic alternatives examined and chosen, the better the performance of the firm.
- P3: In high velocity environments, effective firms make strategic decisions quickly.
- 3.1: In high velocity environments, the shorter the time frame in which strategic decisions are made, the better the performance of the firm.
- P4: In high velocity environments, effective firms build in decision execution triggers.
- 4.1: In high velocity environments, the greater the articulation of implementation triggers at the time a strategic decision is taken, the better the performance of the firm.
- P5: In high velocity environments, effective firms vest power to implement strategy in the top management team.
- 5.1: In high velocity environments, the greater the delegation of execution triggers to the top management team, the better the performance of the firm.
- 5.2: In high velocity environments, the more the power to make functional strategy decisions is delegated to the functional executives, the better the performance of the firm.
- 5.3: In high velocity environments, the greater the power centralisation in the chief executive, the greater the level of political behaviour among the top management team.
- 5.4: In high velocity environments, the greater the political behaviour among the top management team, the poorer the performance of the firm.

**Summary of Propositions from ‘Making Fast Strategic Decisions in High-Velocity Environments’, Kathleen M. Eisenhardt, *Academy of Management Journal*, 1989, Vol 32, No 3.**

- P1: The greater the use of real-time information, the greater the speed of the strategic decision process.
- P2: The greater the number of alternatives considered simultaneously, the greater the speed of the strategic decision process.
- P3: The greater the use of experienced counsellors, the greater the speed of the strategic decision process.
- P4: The greater the use of active conflict resolution, the greater the speed of the strategic decision process.
- P5: The greater the integration among decisions, the greater the speed of the strategic decision process.

**Summary of Propositions from ‘Politics of Strategic Decision Making in High-Velocity Environments: Toward a Midrange Theory’, K.M. Eisenhardt and L.J. Bourgeois III, *Academy of Management Journal*, Vol 31 No 4, 1988**

- P.1: The greater the centralisation of power in a chief executive, the greater the use of politics with a top management team.
- P.2: Conflict is not a sufficient condition for the use of politics. Rather, conflict leads to politics only when power is centralised.
- P.3: The greater the use of politics within a top management team, the greater the likelihood of stable alliance patterns.
- P.4: When the use of politics is high, the basis of alliance is likely to be similarity of demographic attributes.
- P.5: Demographic similarity is not a sufficient condition for stable coalition formation. Rather, demographic similarity leads to stable alliance patterns only when power is centralised and the use of politics is high.
- P.6: The formation of stable alliance patterns lags changes in the use of politics.
- P.7: The greater the use of politics within the top management team, the poorer the performance of a firm.