



Strategic thinking and decision making: literature review

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Abstract

Purpose – The paper seeks to examine both management and psychological literature on strategic decision making.

Design/methodology/approach – A review of the management and psychological literature is undertaken, with particular focus on factors affecting strategic decision making.

Findings – The literature review reveals that managerial cognition as well as individual and corporate values can have an impact on strategic decision making. The review also finds that strategic competencies are important although there is no agreement within the literature on what those competencies are.

Originality/value – Strategic thinking and strategic decision making have been discussed within the psychological and management literature for decades. Psychological and management theoretical perspectives and empirical research have been discussed separately and failed to consider both together. The current paper reviews both psychological and management literature to provide an understanding of the strategic thinking and decision making process and factors that may affect the process.

Keywords Strategic thinking, Strategic decision making, Individual values and beliefs, Organizational culture, Competencies, Psychometric-objectivist model, Strategic management

Paper type Research paper

Introduction

Over the last three decades, there has been considerable theoretical and empirical work, from both the psychological and management disciplines, conducted on strategic thinking and strategic decision making. The work has sought to better understand what makes a good strategic thinker and decision maker, competencies required to be a good strategic thinker and decision maker and factors that may influence an individual's strategic decisions. The purpose of this paper is to draw on both psychological and management research to provide a review of the existing literature on strategic thinking and decision making. It begins with why strategic decision making is important, followed by a discussion of the literature surrounding competencies. The review discusses factors that can influence strategic decision making choice such as managerial cognition, individual values and beliefs as well as corporate values. The review concludes with recommendations for future research. For the purpose of the review strategists, strategic thinkers and strategic decision makers refer to the people at the top of the organisation who have overall responsibility for managing the organisation and making decisions as to the strategic direction of the organisation.

Strategic thinking

Organisations in the twenty-first century face a wide array of complex opportunities including, but not limited to, global market expansion, developing internal and external innovative products and practices to remain competitive as well as e-working.



This is not limited to multi-national companies, but also to medium and small sized businesses. Maintaining a competitive edge in a global, innovative and dynamically evolving environment produces pressure to redefine how business is conducted (Ulijn *et al.*, 2000).

Over a number of years, senior managers have become increasingly concerned about the changing nature of their organisational environments and how they can detect and act on such changes in the environment (Davis, 2002). However, in this dynamic age, outcomes of change are not always predictable and the environment is dynamic, making the detection of change much more difficult (Grewal and Tansuhaj, 2001). The environment includes both internal factors such as the culture of the organisation and individual values and beliefs as well as external factors such as technology, the environment, legislation and politics. Morgan (1997) suggests both internal and external factors need to be taken into account in order for organisations to move forward. Morgan argues that organisations are political systems in which all people pursue their own interests (based on their own values and beliefs) as well as influenced by external factors such as the marketplace, technology and society. It is the role of strategic thinkers to understand both the internal and external factors and their impact on the future of the organisation.

Strategic thinking has been researched in both the management and psychological literature with the management literature focusing on the process of strategic thinking and making strategic decisions (Mintzberg, 1994; Drejer *et al.*, 2005) whereas the psychological literature has focused on factors affecting strategic thinking and decision making (Hambrick and Mason, 2001; Pant, 1998). This review provides an overview of both the approaches and identifies the importance of considering both the approaches together so that an understanding of what makes a good strategic decision maker can be sought. This would aid organisations in developing criteria in which to assess individual strategic decision making effectiveness.

Process of strategic thinking and decision making

According to the management approach strategic thinking involves two distinct thought processes: planning and thinking. Planning concerns analysis, this involves establishing and formalising systems and procedures whereas thinking involves synthesis – encouraging intuitive, innovative and creative thinking at all levels of the organisation (Mintzberg, 1994). Drejer *et al.*, (2005, p. 50) explains this as “thinking about possible scenarios and strategy in a creative manner that is relatively free from existing boundaries”. Bonn, (2005 p. 337) goes farther and defines strategic thinking as “a way of solving strategic problems that combine a rational and convergent approach with creative and divergent thought processes”. Bonn suggests that the process orientation focuses on how strategic thinkers understand and take strategic action in a highly complex, ambiguous and competitive environment. Therefore, strategic thinking is concerned with thinking in a novel way in order to compete in an ambiguous and competitive environment. From this it seems that rather than being planned, strategy emerges over time. As Eisenhardt and Brown, (1998 p. 787) argue, “While, traditionally, strategy was about building long-term defensible positions, or sustainable competitive advantage,” today strategy should focus on continuous adaptation and improvement and be “constantly shifting and evolving in ways that surprise and confound the competition”.

In order to develop/retain competitive edge strategic thinkers need to view the organisation as a complex system that is influenced by internal and external factors, known as systems thinking (Senge, 1990). As Kaufmann (1991) stated, strategic thinking

[...] is a switch from seeing the organisation as a splintered conglomerate of disassociated parts (and employees) competing for resources, to seeing and dealing with the corporation as a holistic system that integrates each part in relationship to the whole. Each system, procedure, policy, organisational culture, individuals working within the organisation and the leader are related to the whole and should be considered such (p. 69).

Thus the strategic thinker needs to be able to scan the external environment as well as obtaining internal operational information. For example, Floyd and Wooldridge (1994) highlighted the significance of using middle managers within the strategic formulation process. It was asserted that strategies formulated with knowledge from middle management and other relevant individuals within an organisation, rather than just the strategic thinker are likely to be superior as consideration is given to both information regarding what actions are required as well as whether the actions to be taken are operationally possible in terms of resources (staff and materials etc). This was exemplified by Slater and Olson (2000) who found that boundary spanners (which represent individuals who perform roles involving management, suppliers and customers) are an important source of information. This is due to these individuals having access to relevant external information that may aid decision making.

In order to aid a strategic thinker's "systems thinking" Kaplan and Norton (2000) introduced the concept of a strategy map that "provides a visual representation of a company's critical objectives". The map allows the strategic thinker to align any decisions made with those of the company's objectives as well as having knowledge of employee competencies and technology that will aid/hinder the implementation of the decision. With a view of a strategy map (identifying the conglomerate parts in the organisation), senior management can understand how implementing a strategic decision on one part of the organisation may have an impact on another. Therefore, according to this approach, effective strategic thinking requires an understanding of the interrelationships and inter-dependencies of each part of the organisation (Marr *et al.*, 2004) and should be a competency found in good strategic decision makers. However research regarding the competencies required for strategic thinking and decision making has been sparse, although the importance of identifying such competencies is acknowledged in the literature. As Bonn (2005, p. 340) argued "an understanding of strategic thinking would benefit from an investigation into the characteristics of an individual strategic thinker as well as the dynamics and processes that take place within the organisational context".

Competencies

Understanding strategic thinking and decision making competencies has become important as research has shown that good strategic competencies are associated with good organisational performance (Russell, 2001). However, there is no agreement, within the literature, as to what these competencies are. According to Senge (1990), strategists can be viewed as particular or outstanding people, who set the directions, make fundamental decisions and encourage their followers. Little attention has been directed towards investigating competencies that make them particular or outstanding

people. The importance of identifying such competencies was outlined by Hambrick (1989) who argues that “if we want to explain why organisations do what they do, or, in turn, why they perform the way they do, we must study top managers”, who represent strategic thinkers and decision makers, and the competencies they have.

A competency is a skill that an individual and thus the organisation possesses that enables it to perform activities (Hubbard *et al.*, 1997). Competency based strategic management is the belief that some traits and behaviours are exhibited more consistently by strategists which can be identified, taught and assessed (Heffernan and Flood, 2000; Perdue *et al.*, 2000). Thus, the concept of core competencies (Hamel and Prahalad, 1994) may be a useful framework assessing how strategic thinkers make choices that impact on the future of the organisation. Jurow (1996) believed that the ability of those in any sector to think strategically is bound by the frames of reference with which they are most familiar: the assumptions, beliefs and accumulated knowledge of a profession or institution. In its broadest sense, “competency” refers to the sum of experiences and knowledge, skills, traits, aspects of self-image or social role, values and attitudes a strategist has acquired during his or her lifetime (Mumford *et al.*, 2000). It is based on past experience in terms of what has been successful and what has not. This was first put forward by Schon (1983) in his seminal work on the reflective practitioner. It is argued that professionals apply formally learned and specialist knowledge to situations and develop repertoires or solutions to difficult problems. The main competence would be reflection where with every experience a strategic decision maker would develop their knowledge of what will and what will not work. However, Schon did not provide a model of types of competence required for strategic decision making, but views reflection as the overarching competency. This was challenged by Garavan and McGuire (2001, p. 152) who stated that “competence is a holistic concept, which consists of technical, management, people, attitude, values and mental skill components. It is the combination of all of these that forms the basis for a strategist’s behaviour and performance.” At an operational level it does not identify the competency required to make the decision. Hitt *et al.*, (2001, p. 489) define the competency for strategic thinking and decision making as “the ability to anticipate, envision, maintain flexibility and empower others to create strategic change as necessary”. However, Vigoda-Gadot and Meiri (2008) identified other factors that also need to be taken into account when trying to develop and implement a vision. It is having the strategic capabilities/competencies to encourage staff, create common values such as trust, honesty and creativity and create an environment which allows for development both of the individual and the organisation, so as to encourage commitment to the strategic direction of the organisation. This is a competence not identified by the management literature, but one that is important to ensure that both individuals and the organisation are aiming for the same strategic goal. However, the competencies that appear to be required for strategic thinking are quite generic in nature (Garavan and McGuire, 2001), and could be applicable to management in general in a number of organisations.

Research has been conducted to identify the core competencies required to be able to think strategically and make strategic decisions. Garavan and McGuire (2001) identified six clusters of competencies, which consist of technical competencies; business competencies; knowledge management competencies; leadership competencies; social competencies and intrapersonal competencies. The business competency is viewed as the

most important competency in strategic thinking and decision making (Hogan, 2003) and includes sub-competencies of strategic perception, decision making and board management, the ability to think in terms of systems as well as providing a vision, meaning and direction (Scholtes, 1999). However, this suggests that the technical competencies, knowledge management competencies, leadership competencies, social competencies and intrapersonal competencies are not important for strategic thinking and decision making, planning and implementation. This seems implausible, as to think strategically, strategists would need up-to-date and relevant information so that they produce alternative scenarios and solutions. This would suggest the need for knowledge management. Leadership competencies would also be required, as once strategic thinking has occurred and the decision has been made on the direction of the organisation, it is the strategist's role to take forward the employees and achieve the vision that has been expressed. Without the leadership competency to direct the employees, each individual would be working in their own way and not aiming for a common goal. Therefore, it appears that a number of competencies are required in order to think and act in a strategic way. However, within this set of competencies there is a lack of reference to decision making, which is a vital aspect of the strategist's role and one that steers the organisation into the future. It is, therefore, easier to comprehend the core competencies into two global competencies; thinking and decision making. The core competencies for strategic thinking could include business, technical, knowledge management, leadership, social and intrapersonal competencies as determined by Garavan and McGuire (2001). The competency of strategic decision making may include separate competencies. According to Liedtka (1998) the strategic decision making competency consists of five characteristics.

- (1) Appreciating how different parts of the organisation influence each other, so that a holistic view can be taken that is influenced by internal as well as external factors.
- (2) Creating a fit between existing resources and opportunities as there needs to be resources in place including people, processes, finances and technology, in order for the vision to be implemented.
- (3) Understanding the inter-connectivity and opportunities between the organisation and the marketplace including understanding competitors and their limitations so that opportunities can be developed.
- (4) Hypothesising and testing by asking "what if?", "if then?" type questions. This includes managing risk in terms of what if a product or service does not work well? What do we do then? It is looking at all the possible outcomes from the implementation of the new vision so that plans can be put in place for a variety of outcomes.
- (5) Having an intelligent opportunistic view, which enables the strategic decision maker to recognise and take advantage of new opportunities.

Characteristic four of hypothesizing is based on the strategic decision making competency described by Judge and Miller (1991) where strategists utilise their experience from their personal, business and functional expertise to inform their choices. This relates to how managers process information and analyse it in relation to new situations. This process is known as managerial cognition.

Managerial cognition

Managerial cognition refers to the capacity and inclination to attend to analytic detail and to cut through that detail by the use of intuitive processing strategies (Hodgkinson and Clarke, 2004). It is the ability to process complex information, and think analytically. Thus, what is ultimately needed is the ability to switch back and forth between “habits-of-the-mind” and “active thinking,” a process referred to as “switching cognitive gears” (Louis and Sutton, 1991). In practice, the ability to switch from one processing strategy to another (past experience to present situation) is difficult because of strong individual differences in the way in which information is gathered, organised, processed and evaluated (Messick, 1984). Each individual uses different ways to process information. Based on processing differences, Lewis (2002) argues that we should be asking whether there are different approaches that strategic decision makers choose dependent on their circumstances, objectives and personal preferences. Lewis suggests that an organisation adopts strategies as a direct result of a strategic decision maker’s choice which, is constrained by societal, sectoral, environmental and organisational factors. If strategists choose the approach depending on their personal circumstance, it suggests that strategic thinking is a conscious individual mental process.

Individuals think about decision problems and evaluate possible responses using two complementary processes:

- (1) a largely automatic, pre-conscious process which involves developing and using heuristics (i.e. basic rules of thumb based on past experience); and
- (2) a deeper, more effortful process involving detailed analysis (Hodgkinson and Sparrow, 2002).

This is based on the cognitive theory where individuals construct meaning and make sense by building mental representations that guide their thinking and the direction of their decisions (Rumelhart and Norman, 1985). They visualise the likely situation, the action to be taken and the likely outcome. However, problems can arise when there is too much information to process and individuals become overloaded with complex information. Individuals have limitations on their memory in terms of how much information they can process (Tversky and Kahneman, 1974). Thus they develop a limited repertoire of strategic choices. These limit their ability to envision alternative courses of action (Geletkanyez and Hambrick, 1997). This is because individuals fall back on past learning and experience in a variety of business settings (Gavetti *et al.*, 2005). Strategic thinkers have at their disposal a wealth of information and research designed to help them make the “right decision,” but strategic choices often reflect their personal views on the nature of strategy and how it should be formulated based on past experience. This is known as reasoning by analogy, where strategic thinkers think back to similar situations and apply lessons learnt from that experience to the current experience (Jarzabkowski and Seidl, 2007). However, relying on individual experience can result in “biases and beliefs which may mean that something is excluded because it is not seen as important” (Hussey, 2001, p. 2,003). This may be due to past experience of a similar situation. This is because when faced with a dilemma, a strategic decision maker relies on their own perspective of strategy and how it relates to the organisation and the environment (Hendry, 2000). Therefore, strategy is linked to a strategic thinker’s view of how the organisation should operate and function (Hambrick and

Frederickson, 2001) and is subject to biases such as complex problems being based on simple past decisions, for example. The fact is that decision makers will bring a cognitive base and individual values on which to base a decision. This may create a barrier between the actual situation and the perception of the situation.

Barriers to effective decision making are important in considering why certain decisions have or have not been made. The psychological literature has focused on such barriers to effective decision making and has researched the effect of individual values and beliefs as well as organisational values and beliefs (corporate values).

Individual and corporate values

One element that has become apparent in the management literature is that decisions are influenced by an individual's beliefs and values. From a psychological perspective, Schwartz (1992, p. 2) defined values as "desirable states, objects, goals or behaviours transcending specific situations and applied as normative standards to judge and to choose among alternative modes of behaviour". This definition highlights two important functions. First, they are enduring and transcend situations; values can provide coherence and a sense of purpose to an individual's behaviour. Second, because they are normative standards values can form the basis for generating behaviours that conform to the needs of groups or larger social units (Lord and Brown, 2001).

Values serve as strong informal regulatory guides when making decisions, and influence cognitive processes such as managerial cognition. For example, values specify modes of behaviour that are socially acceptable and serve as a normative regulatory guide for individual workers (Meglino and Ravlin, 1998) and they have a long tradition of shaping, directing and guiding human behaviour and decision making in and out of organisations (Box *et al.*, 1991). Hambrick (1989) proposed that strategic choices/decision making are a reflection of top executives' cognitive base (shaped largely through background experience and values). Pech and Durden (2003) argue that decisions are often filtered through attitudes, beliefs and values; poor decision making occurs when the filtering of the information conflicts with individual perceptions and values and results in poor assessment. These values are posited to have a salient effect on strategic choice through a process known as behaviour channeling (England, 1967) whereby strategic decision makers' values determine choice and their selection of appropriate strategic action. For example, Gallen (2006) found from a study of 70 managers in 13 spas that their cognitive styles and their way of processing information had an effect on strategies they preferred. In addition, values directly affected choice through a process of "perceptual screening" which is a shaping of the strategic decision maker's limited view of the organisation and its environment. As has been found within the literature, when faced with a dilemma, a strategic decision maker often, but not always, relies on their own perspective of strategy and how it relates to the organisation and the environment (Hendry, 2000). Therefore, strategy is linked to a strategist's view of how the organisation should operate and function ((Hambrick and Mason, 2001; Pant, 1998) and can affect decision making.

Given that managerial cognition influences decision making and competitive strategies (Buksar, 1999), the cognitive aspects of strategists is key to our understanding of how competitive organisations are developed. The cognitive model sees decision makers as trying to produce a total view of the environment, which is based on incomplete knowledge (Paton and Wilson, 2001). Strategists try to simplify

the incomplete information they have based on their past experience and own cognitive styles (Pellegrino and Carbo, 2001). Thus any decisions made would be made based on the strategist's values, beliefs and experience, which ultimately could restrict the choices that they make. Essentially then values serve as blueprints or foundations for making decisions, solving problems and resolving conflicts. It is when these values become a hindrance to making the decision that problems arise.

Every enterprise is driven by its leaders' individual and collective values, whether these values are consciously understood, or unconsciously influential, spoken or unspoken, written or unrecorded (Bean, 1993). However, according to Finkelstein and Hambrick (1996), a strategist's values limit their field of vision, affect their selective perception, influence their interpretation of information and reflect the choices that they make. This is due to bounded rationality (Simon, 1987) whereby individuals make decisions based on a rule of thumb approach, whereby rational calculations are made and decisions appear to be in their own best interests. This according to Hodgkinson and Sparrow (2002) is an automatic pre-conscious process that is difficult to change.

It is necessary, therefore, for strategists to understand how their commitments to the task and responsibilities bind them to transcendent values and purposes as well as how their sense of meaning and integration is put into the strategist's role (Banks and Powell, 2000). However, it is not just personal values that can have an impact on the strategic direction of the organisation.

Corporate values are also powerful drivers of individual and organisational performance and provide the criteria by which decisions are made. Incongruent individual and corporate values can undermine strategic leadership, as strategists may not believe in the values and beliefs of the organisation and may not be able to work within these. The organisation may not take into account the values and beliefs of the strategist, making it a difficult situation when making strategic decisions that will influence both the strategist making the decision and the organisation. Therefore, strategists must aim for value congruence where there is no conflict between the value systems. As a result of this, Dolan and Garcia (2002) developed "Management by Values" (MBV) as an emerging strategic leadership tool and aid in the congruence of organisational and individual values.

According to MBV, a company should have "explicitly" defined two groups of values or shared principles which guide day to day working objectives; namely the

- (1) values associated with vision (where are we going?) and the company's mission (what for? Why does the company exist?); and
- (2) operating values; the way things are done to meet the challenges of the industry such as the marketplace, technology, etc whilst meeting its vision and mission.

It appears that strategic thinkers and decision makers need to be able to adapt and change to meet the demands of the marketplace (values associated with vision), whilst also motivating and encouraging employees to commit to the changes and work towards the new vision (operating values). Managers also need to be able to communicate and guide employees towards the new strategic vision by changing policies, providing additional resources and by articulating the vision in terms of its aims and objectives and vision and mission statements. Ensuring value congruence between corporate and personal goals makes the process smoother. This was supported by Vigoda-Gadot and Meiri (2008), who found that a mismatch between

individual values and organisational values may lead to problems both within the intra-organisational layer, such as not adhering to organisational standards of behaviour and performance that leads to non-fulfilment of work duties, and within the extra-organisational layer which focuses on the levels of service provided by the organisation.

The aim of strategic thinking and decision making is to ensure survival of the organisation in a competitive marketplace. For this to occur there is a need for effective strategic thinking and decision making that steers the organisation in the most appropriate direction. It is, therefore, paramount for the process of effective decision making, which the management approach details, as well as factors that may affect strategic decision making which both the management and psychological literature discuss. By examining the literature from both the management and psychological discipline allows for an understanding of how decisions are made, competencies required and interventions to be developed that allow strategists to overcome barriers. Competencies identified from the management approach require validation, which could be a focus of future management/psychological research. Once competencies are validated, a technique such as the "psychometric objectivist" model (Anderson, 1992) could be employed. This model underpins the selection and development of people into job roles. This allows for the assessment of strategic decision making competencies as well as identification of individuals who have a weakness in one area of competence (such as the impact of values and beliefs on decision making). Development programs for each weak competency could be implemented so that the individual can develop their skill in that area. By using this method it is possible to assess and predict a strategic decision thinker's and decision maker's performance. This is vital to the future of the organisation as in order for organisations to survive into the future it needs a strategic decision maker who makes the correct choices to meet the organisation's objectives.

Conclusions and research implications

Strategic thinking and decision making is based on taking a view of where the organisation has been (past), where it is now (present) and how it can survive in a dynamic environment (future). The literature reviewed, herein, has suggested that managerial cognition, corporate values as well as individual values and beliefs can have an influence on strategic decision making choices. The review also acknowledges that strategic decision making competencies are important. However, as yet, there is no agreement on what these competencies might represent. Future research should focus on the identification and validation of strategic decision making competencies as well as developing a tool that assesses these competencies and interventions to address weak areas. This will allow organisations to develop/employ the best strategists into their organisation to ensure it maintains a competitive edge.

References

- Anderson, N.R. (1992), "Eight decades of employment interview research: a retrospective meta-review and prospective commentary", *European Journal of Work and Organisational Psychology*, Vol. 2 No. 1, pp. 1-32.
- Banks, R. and Powell, K. (2000), *Faith in Leadership: How Leaders Live Out Their Faith In Their Work And Why It Matters*, Jossey-Bass, San Francisco, CA.

- Bean, W.C. (1993), *Strategic Planning That Makes Things Happen: Getting From Where You are to Where You Want to Be*, Human Resource Development, Amherst, MA.
- Bonn, I. (2005), "Improving strategic thinking: a multilevel approach", *Leadership and Organization Development Journal*, Vol. 26 No. 5, pp. 336-54.
- Box, W.R., Odom, R.Y. and Dunn, M.G. (1991), "Organizational values and value congruency and their impact on satisfaction, commitment and cohesion: an empirical examination within the public sector", *Public Personnel Management*, Vol. 20 No. 1, pp. 195-205.
- Buksar, J.R. (1999), "Strategic bias: the impact of cognitive biases on strategy", *Canadian Journal of Administrative Sciences*, Vol. 16 No. 2, pp. 105-17.
- Davis, A. (2002), "Early warning signs to safeguard your business", *Electronics Weekly*, Vol. 2058, p. 19.
- Dolan, S.L. and Garcia, S. (2002), "Managing by values: cultural redesign for strategic organizational change at the dawn of the twenty-first century", *Journal of Management Development*, Vol. 21 No. 2, pp. 101-17.
- Drejer, A., Olesen, F. and Strandskov, J. (2005), "Strategic scanning in a new competitive landscape: towards a learning approach", *International Journal of Learning*, Vol. 2 No. 1, pp. 47-64.
- Eisenhardt, K.M. and Brown, S.L. (1998), "Competing on the edge: strategy as structure chaos", *Long Range Planning*, Vol. 31 No. 5, pp. 786-9.
- England, G.W. (1967), "Personal value systems of American managers", *Academy of Management Journal*, Vol. 10, pp. 53-68.
- Finkelstein, S. and Hambrick, D. (1996), *Strategic Leadership: Top Executives and their effects on Organizations*, West Publishing Company, St Paul, MN.
- Floyd, S.W. and Wooldridge, B. (1994), "Dinosaurs or dynamos? Recognising middle management's strategic role", *Academy of Management Executive*, Vol. 64 No. 4, pp. 27-39.
- Gallen, T. (2006), "Managers and strategic decisions: does the cognitive style really matter", *Journal of Management Development*, Vol. 25 No. 2, pp. 118-33.
- Garavan, T.N. and McGuire, D. (2001), "Competencies and workplace learning: some reflections on the rhetoric and the reality", *Journal of Workplace Learning*, Vol. 13 Nos 3/4, pp. 144-63.
- Gavetti, G., Levinthal, D.A. and Rivkin, J.W. (2005), "Strategy making in novel and complex worlds: the power of analogy", *Strategic Management Journal*, Vol. 26, pp. 691-712.
- Geletkanyez, M.A. and Hambrick, D.C. (1997), "The external ties of top executives: implications for strategic choice and performance", *Administrative Science Quarterly*, Vol. 42 No. 4, pp. 654-81.
- Grewal, R. and Tansuhaj, P. (2001), "Building organisational capabilities for managing economic crisis: the role of market orientation and strategic flexibility", *Journal of Marketing*, Vol. 65 No. 2, pp. 47-80.
- Hambrick, D.C. and Frederickson, J. (2001), "Are you sure you have a strategy", *Academy of Management Executive*, Vol. 15 No. 4, pp. 48-59.
- Hambrick, D.C. and Mason, P.A. (2001), "Upper echelons: the organization as a reflection of its top managers", *Academy of Management Review*, Vol. 9, pp. 193-206.
- Hambrick, D. (1989), "Putting top managers back in the strategy picture", *Strategic Management Journal*, Vol. 10, pp. 5-15.
- Hamel, G. and Prahalad, C.K. (1994), *Competing for the Future*, Harvard Business School Press, Harvard.

- Heffernan, M.M. and Flood, P. (2000), "An exploration of the relationships between the adoption of managerial competencies, organisational characteristics, human resource sophistication and performance in Irish organisations", *Journal of European Industrial Training*, Vol. 24 Nos 2-4, pp. 128-36.
- Hendry, J. (2000), "Strategic decision making discourse and strategy as social practice", *Journal of Management Studies*, Vol. 37, pp. 955-77.
- Hitt, M.A., Ireland, R.D. and Hoskisson, R.E. (2001), *Strategic Management Competitiveness and Globalization*, South Western College Publishing, Cincinnati, OH.
- Hodgkinson, G.P. and Clarke, I. (2004), *Toward a Cognitive Resource Theory of Organisational Strategising*, Advanced Institute of Management, Leeds.
- Hodgkinson, G.P. and Sparrow, P.R. (2002), *The Competent Organization: A Psychological Analysis of the Strategic Management Process*, Open University Press, Buckingham.
- Hogan, R. (2003), "Educating the modern manager", *Academy of Management Learning and Education*, Vol. 2 No. 1, pp. 74-84.
- Hubbard, G., Pocknee, G. and Taylor, G.A. (1997), *Practical Australian Strategy*, Prentice Hall, Sydney.
- Hussey, D. (2001), "Creative strategic thinking and the analytical process: critical factors for strategic success", *Strategic Change*, Vol. 10 No. 4, pp. 201-13.
- Jarzabkowski, B.J. and Seidl, D. (2007), "Strategizing: the challenges of a practice perspective", *Human Relations*, Vol. 60 No. 1, pp. 5-27.
- Judge, W.Q. and Miller, A. (1991), "Antecedents and outcomes of decision speed in different environments", *Academy of Management Journal*, Vol. 34 No. 2, pp. 449-64.
- Jurow, S. (1996), "Core competencies: strategic thinking about the work we choose to do", *The Journal of Academic Librarianship*, Vol. 22 No. 4, pp. 300-2.
- Kaplan, R.S. and Norton, D.P. (2000), "Having trouble with your strategy? Then map it", *Harvard Business Review*, Vol. 78 No. 5, pp. 167-76.
- Kaufmann, R. (1991), *Strategic Planning Plus: An Organizational Guide*, Scott Foresman, Glenview, IL.
- Lewis, D. (2002), "The place of organizational politics in strategic change", *Strategic Change*, Vol. 11, pp. 25-34.
- Liedtka, J.M. (1998), "Linking strategic thinking with strategic planning", *Strategy and Leadership*, September/October, pp. 30-5.
- Lord, R. and Brown, D. (2001), "Leadership values, and subordinate self-concepts", *Leadership Quarterly*, Vol. 12 No. 3, pp. 133-52.
- Louis, M.R. and Sutton, R.I. (1991), "Switching cognitive gears: from habits of mind to active thinking", *Human Relations*, Vol. 44 No. 1, pp. 55-76.
- Marr, B., Schiuma, G. and Neely, A. (2004), "The dynamics of value orientation: mapping your intellectual performance drivers", *Journal of Intellectual Capital*, Vol. 5 No. 2, pp. 312-25.
- Meglino, B.M. and Ravlin, E.C. (1998), "Individual values in organizations: concepts, controversies and research", *Journal of Management*, Vol. 24 No. 3, pp. 351-89.
- Messick, S. (1984), "The nature of cognitive styles: problems and promises in educational practice", *Educational Psychologist*, Vol. 19 No. 2, pp. 59-74.
- Mintzberg, H. (1994), "The fall and rise of strategic planning", *Harvard Business Review*, January-February, pp. 107-14.
- Morgan, G. (1997), *Images of Organization*, Sage, Thousand Oaks, CA.

- Mumford, M.D., Marks, M.A., Connelly, M.S., Zaccaro, S.J. and Reiter-Palmon, A. (2000), "Development of leadership skills: experience and timing", *Leadership Quarterly*, Vol. 11 No. 1, pp. 87-114.
- Pant, P.N. (1998), "Value incongruity and strategic choice", *Journal of Management Studies*, Vol. 35 No. 2, pp. 195-212.
- Paton, D. and Wilson, F. (2001), "Managerial perceptions of competition in knitwear producers", *Journal of Managerial Psychology*, Vol. 16 No. 4, pp. 289-301.
- Pech, R.J. and Durden, G. (2003), "Manoeuvre warfare: a new paradigm for business decision making", *Management Decision*, Vol. 41 No. 2, pp. 168-79.
- Pellegrino, K. and Carbo, J. (2001), "Behind the mind of the strategist", *The TQM Magazine*, Vol. 13 No. 6, pp. 375-80.
- Perdue, J., Ninemeier, J. and Woods, R. (2000), "Competencies required for club managers", *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 41 No. 2, pp. 79-85.
- Rumelhart, D.E. and Norman, D.A. (1985), "Representation of knowledge", in Aitkenhead, A.M. and Slacks, J.M. (Eds), *Issues in Cognitive Modelling*, Lawrence Erlbaum Associates, London.
- Russell, R. (2001), "The roles of values in servant leadership", *Leadership and Organization Development Journal*, Vol. 22 No. 2, pp. 76-83.
- Scholtes, P.R. (1999), "The new competencies of leadership", *Total Quality Management*, Vol. 10 Nos 4/5, pp. 704-10.
- Schon, D.A. (1983), *The Reflective Practitioner: How Professionals Think in Action*, Temple Smith, London.
- Schwartz, S.H. (1992), "Universals in the content and structure of values: theory and empirical tests in 20 countries", in Zanna, M. (Ed.), *Advances in Experimental Social Psychology*, Academic Press, New York, NY, pp. 1-65.
- Senge, P.M. (1990), *The Fifth Discipline*, Random House, Sydney.
- Simon, H.A. (Ed.) (1987), *Bounded Rationality*, Macmillan, London and Basingstoke.
- Slater, S.F. and Olson, E.N. (2000), "Strategy type and performance: the influence of sales force management", *Strategic Management Journal*, Vol. 21 No. 8, pp. 813-29.
- Tversky, A. and Kahneman, D. (1974), "Judgment under uncertainty: heuristics and biases", *Science*, Vol. 185 No. 4157, pp. 1124-31.
- Ulijn, J.M., O'Hair, D., Weggeman, M., Ledlow, G. and Hall, H.T. (2000), "Innovating the corporate strategy: what would be the mission for international business communication?", *Journal of Business Communication on Strategy, Innovation, Culture and Communication*, Vol. 37 No. 3, pp. 293-317.
- Vigoda-Gadot, E. and Meiri, S. (2008), "New public management values and person-organization fit: a socio-psychological approach and empirical examination among public sector personnel", *Public Administration*, Vol. 86 No. 1, pp. 111-31.

Further reading

- Drejer, A. (2004), "Back to basics and beyond: strategic management – an area where practice and theory are poorly related", *Management Decision*, Vol. 42 Nos 3/4, pp. 508-20.

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