

The Board and Strategic Change: A Learning Organisation Perspective

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This study examined the relationships between the board, organisational learning, and strategic change. Drawing from both corporate governance and organisational learning literature, an integrated conceptual framework was developed. The framework highlights duality in the strategy process; that is, when the board participates in strategic decision-making it will also influence organisational learning. The study was based on the premise that different board characteristics will impact on organisational learning in different ways. The board characteristics included in the framework were board diversity, the role of the board, the power of the board in relation to top management, the board's ability to access information about the organisation, and the maximand of corporate governance. Two kinds of organisational learning flows were also considered: feed-forward learning and feedback learning. Interactions between these two learning flows may trigger or halt the strategic change of a firm. The study concludes that (1) to support strategic change through organisational learning requires that boards balance both control and service roles, exercising appropriate power in relation to top management and having adequate access to essential company information; (2) boards with relatively higher diversity in their composition are more likely to enhance strategic change by facilitating organisational learning than those that are relatively homogenous; and (3) boards that pursue maximization of stakeholder value are more likely to influence strategic change by facilitating organisational learning than those that pursue maximization of shareholder value.

Field of Research: Corporate Governance

1. Introduction

With regard to the recent trend of increasing shareholder power and the urge to improve corporate governance, researchers have focused on the role of boards not only in monitoring and evaluating managerial performance, but also in providing a service to the organisation and dealing with strategic issues (Hendry and Kiel, 2004; Johnson, Daily and Ellstrand, 1996; Zahra and Pearce, 1989). Van der Walt and Ingley (2001) suggest that there is an emerging need for the strategic contribution by the board in a dynamic environment. They indicate the changing role of directors as "moving the implicit paradigm away from the 'pathology' of governance [failures] to the strategic contribution for 'fitness and survival'" (van der Walt and Ingley, p.184).

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This implies that board involvement in corporate strategy has become increasingly important. It also implies that as boards become more actively involved in influencing strategy development, they will thus have an impact on the process of strategic change in their organisations.

Several empirical studies have indicated the relationship between boards and strategic change. Goodstein and Boeker (1991) stated, for example, that changes in board composition or outsider representation affect strategic change in hospitals. Golden and Zajac (2001) reported that strategic change is influenced by the characteristics of the board and board members, including board size, board tenure, age of board members, and occupational heterogeneity of board members. Goodstein, Gautam and Boeker (1994) identified boards' strategic role as "taking important decisions on strategic change that help the organisation adapt to important environmental changes" (p.242). Hoskisson, Johnson and Moesel (1994) provided evidence showing that boards have played a significant role in strategic change such as organisational restructuring and renewal. These studies highlight the relevance of the board's strategic role and its influence on strategic change.

The application of organisational learning to strategic change has attracted much attention in the arenas of management practice and academic research. For instance, Whipp, Rosenfeld and Pettigrew (1989) and Whipp (1991) have depicted strategic change as a learning process where the path of strategy is indirect and non-linear. Barr, Stimpert and Huff (1992) indicated that strategic change, which requires alteration of managers' mental models, can be portrayed as processes of organisational learning, including both single-loop and double-loop organisational learning. Kuwada (1998) suggested that strategic change occurs when double-loop learning (termed "strategic learning") emerges as a result of the evolution of single-loop learning. He argued that a stream of incremental changes may eventually result in dramatic change. Hence, strategic changes can be direct through organisational learning that reformulates basic assumptions about organisational restructuring, renewal, or innovation.

Researchers, however, have rarely focused on the relationship between boards and organisational learning. An exception is Tainio, Lilja and Santalainen (2003) who argued that as two key groups of actors that manage and control corporations, both boards and senior managers play a crucial role in supporting or hindering organisational learning. Moreover, because boards have the authority to recruit or dismiss top managers and supervise management performance (Zahra and Pearce, 1989), they can significantly influence strategic change by exercising the power of appointing new CEOs (Westphal and Fredrickson, 2001).

The literature indicates that boards can have significant impacts on strategy and strategic change, but the influence of the board in strategic decision-making is still unclear. While organisational learning has played a central role in strategy process and strategic change, how boards influence strategic change through their impact on organisational learning has rarely been explored. Although boards have become more proactive and accountable than ever, relevant studies are still scarce in linking the influence of the board on organisational learning to strategic change.

The main objective of this study was to develop an integrated theoretical framework,

based on the extant literature relating to the interplay between boards, organisational learning and strategic change. Such an examination can reveal how the board may shape organisational learning and subsequent strategic change through the strategy process. However, it is reasonable to assume that the resultant effects from the influence of boards on organisational learning and, hence, on strategic change might vary according to different characteristics of the board. Accordingly, five characteristics were selected for this study from the corporate governance literature: (1) board diversity, (2) the role of the board, (2) the power of the board in relation to top management, (4) the board's ability to access information about the organisation and (5) the maximand¹ of corporate governance.

Thus, this study addresses the following questions:

- How might boards influence strategic decision-making?
- How might boards influence organizational learning?
- What might be the impact of different characteristics of the board on organizational learning?
- How might boards influence strategic change through their impact on the process of organizational learning?

The paper is organised as follows: the next section discusses the duality of strategy process and organisational learning. This is followed by an examination of the board's influence on strategic decision-making. The influences on organisational learning processes from the five selected characteristics of the board are analysed in the fourth section. The board's impacts on strategic change through organisational learning are summarised in the fifth section in an integrated framework. Finally, conclusions are drawn and a future research agenda is suggested.

2. The Duality of Strategy Process and Organisational Learning

2.1 Strategic Decision-Making Process

Researchers have proposed a variety of perspectives regarding the process of strategic decision-making. These include the rational perspective (Simon, 1965; Porter, 1998), the bounded-rational perspective (Cyert and March, 1963; Simon, 1997), the cognitive perspective (Porac and Thomas, 2002; Prahalad and Bettis, 1986; Schwenk, 1984), the power and political perspective (Allison, 1971; Eisenhardt and Zbaracki, 1992), the organisational perspective (Banks and Wheelwright, 1979; Burgelman, 1983a; Chakravarthy and Lorange, 1991) and the emergent perspective (Burgelman, 1983b; Cohen, March and Olsen, 1972). However, all of these perspectives display explanatory inadequacy inasmuch as none presents a complete picture of both the processes of strategic decision-making and the formation of strategies. In response to this weakness scholars have suggested synthesized approaches. For instance, Mintzberg (1978) developed a model of a strategic decision process that integrates rational decision-making, political influence and the emergent perspective. Schwenk (1988, 1989) proposed a comprehensive model that views strategic decisions as a complex process where cognitive, organisational and political factors interact with each other.

Adapting from Chakravarthy and White (2002), we introduce a comprehensive framework (shown in Figure 1) that integrates different perspectives to illustrate how

the strategy is formed, implemented, or changed. There are three main components in this framework. The first component (the lower part of Figure 1) refers to the relationships between strategy, business context and the firm's performance. The business context includes a firm's external environment and its core competencies. The strategy of an organisation will influence its financial performance as well as its business context. In turn, the business context will affect both an organisation's strategy and its financial performance.

The second component (the middle part of Figure 1) refers to the relationships between core elements of the strategy process, the strategy and the strategic cognitive structures. Core elements of the strategy process comprise two constituents — decisions and actions. Taking both rational and emergent perspectives into account, strategies are viewed as outcomes that result from a stream of planned and emergent decisions and actions; in other words, strategy formulation and implementation are closely interwoven. To reflect the cognitive perspective, we argue that the key feature of the strategy process is the strategic cognitive structures (or organisational knowledge structures) that direct strategic decisions and actions (Lyles and Schwenk, 1992). Accordingly, we have adopted this perspective rather than Chakravarthy and White's (2002) "decision and action premises". Referring to the structures of "shared belief at the organisational level" (Lyles and Schwenk, 1992, p.156), the strategic cognitive structures not only provide top management with a cognitive representation of their organisation's key strategic issues (such as strategic tendency, industry competition and core competencies), but also serve as a "cognitive filter" to screen the information that may be used in the strategy process (Bettis and Prahalad, 1995; Porac and Thomas, 2002). According to Lyles and Schwenk (1992), the strategic cognitive structures comprise core and peripheral components. The core cognitive structure, which is stable in character, describes a firm's beliefs and goals and allows its members to comprehend the basic organisational purpose and mission. The peripheral cognitive structure plays a role in supporting the core structure, demonstrating a more changeable pattern over time.

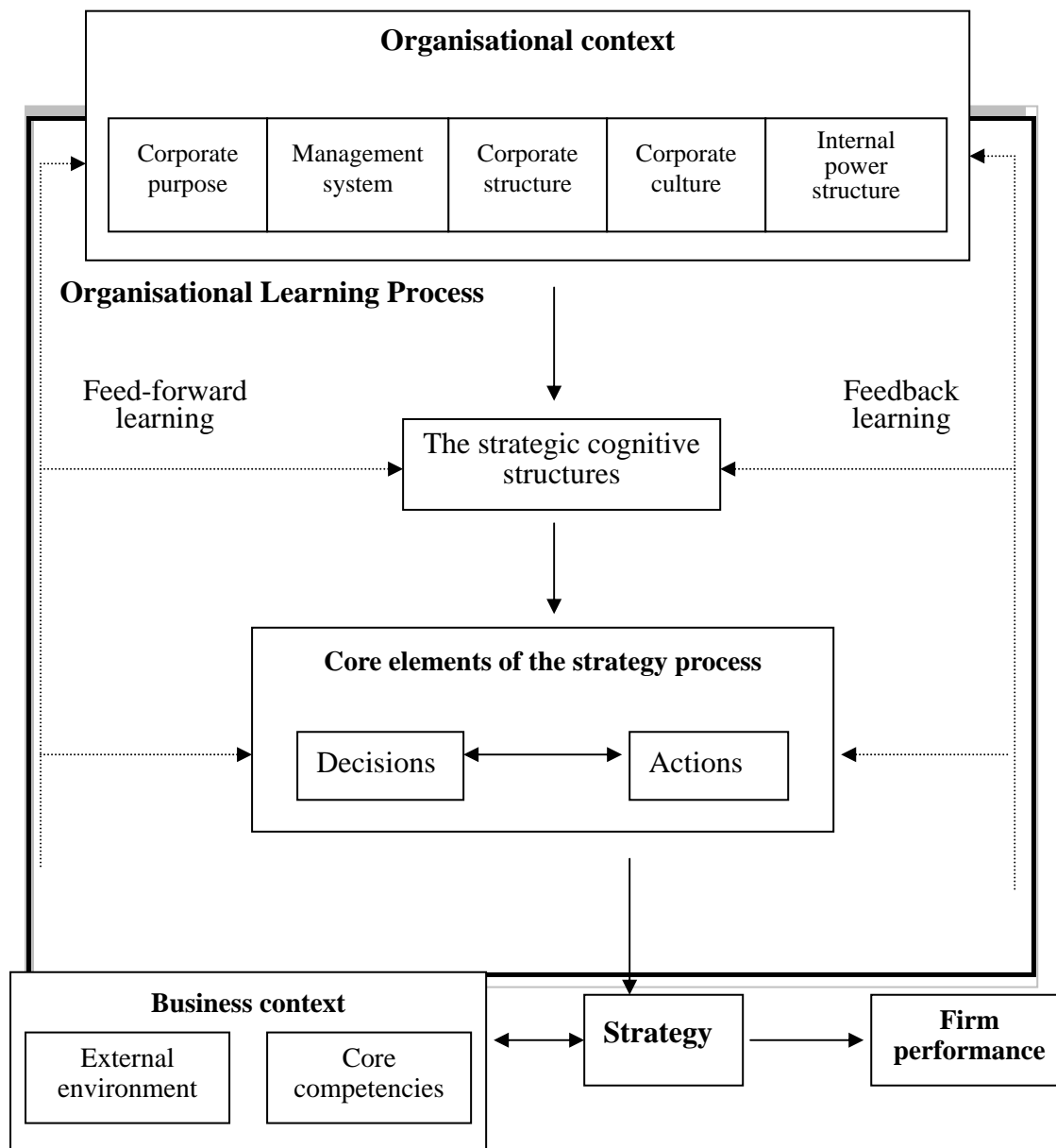


Figure 1: Strategy process (Adapted from Chakravarthy and White (2002))

The third component (the upper part of Figure 1) refers to the relationship between the organisational context and the strategic cognitive structures. The organisational context comprises corporate purpose, management systems, corporate structure, corporate culture and internal power structure. The organisational context influences strategic cognitive structures and subsequent strategic decisions and actions. This reflects the organisational perspective as well as the power and political perspective.

Overall, the dynamic interactions between organisational context, the strategic cognitive structures, core elements of the strategy process, corporate strategy, firm performance and business context will each influence the other. According to this framework, strategic decisions are made by decision makers with cognitive limits. The strategic cognitive structures represent the mental models (or dominant logic) of senior managers in a company. The impacts on the strategic cognitive structures

originate mainly from the organisational context (including the internal power structure) and organisational learning effects. When environmental change occurs, the new event will call for problem recognition (Mintzberg, Raisinghani and Théorêt, 1976). The multiple political interest groups will submit to top managers their interpretations and alternative solutions, which serve their own political ends. Strategic planning systems, information systems and organisational structures will affect strategic cognitive structures, decisions and actions (Schwenk, 1989). The decision process features several streams of participants, solutions, problems and choices, which interact with each other (Cohen et al., 1972). Nevertheless, once a new strategic orientation has been established, these factors will collaborate to maintain a stable strategic orientation. As stated by Schwenk (1988), these factors “may all work together to support a particular strategic orientation for a company and make it extremely difficult for this orientation to change” (p.84). In other words, these factors will form a specific core cognitive structure in an organisation, which tends to remain stable for a considerable period of time.

2.2 Strategy Process and Organisational Learning

An important feature of the comprehensive framework proposed in the previous section (Sub-section 2.1) is that a strategy process occurs together with an organisational learning process. Burgelman (1988) contended that strategy formation is a “social learning process” in which managerial action and cognition are primarily interwoven. This view is shared by Hurst, Rush and White (1989), who used a “creative management model” to suggest how cognitive styles of top management may influence strategy orientation. Both studies suggest that a strategy process works hand-in-hand with an organisational learning process; in other words learning plays an important role in the strategy process. As argued by Grundy (1994), strategic change is a dual process that combines both learning and action circles which perform simultaneously within an organisation. Similarly, we view the strategy process as being characterised by duality – that is, a strategy process coupled with an organisational learning process.

The concept of organisational learning, however, lacks a common definition agreed on by researchers (Huber, 1991). For instance, Argyris and Schön (1978) argued that “organisational learning occurs when members of an organisation act as learning agents for the organisation, responding to changes in the internal and external environments of the organisation by detecting and correcting errors in organisational theory-in-use, and embedding the results of their inquiry in private images and shared maps of organisation” (p.29). Miller (1996) defined organisational learning as “the acquisition of new knowledge by actors who are able and willing to apply that knowledge in making decisions or influencing others in the organisation” (p.486). Huber (1991) included four constructs of organisational learning — knowledge acquisition, information distribution, information interpretation and organisational memory. To understand interactions between organisational learning and strategy process, it is useful to examine the how individuals learn in social contexts (e.g., firms, organisations) and how these social contexts may be influenced by the learning results. We consider that the “4i” learning framework proposed by Crossan, Lane, and White (1999) reflects the linkage between individuals and the organisation regarding the impacts of organisational learning on the strategy process.

Table 1. “4i” organisational learning framework

Level	Process	Inputs/Outcomes
Individual	Intuiting	Experiences Images Metaphors
	Group	Interpreting
Integrating		Shared understandings Mutual adjustment Interactive systems
Organisation	Institutionalising	Routines Diagnostic systems Rules and procedures

Source: Crossan et al. (1999)

Crossan et al.’s (1999) framework includes four psychological and social processes: intuiting, interpreting, integrating, and institutionalising. This framework links three levels of learning within organisations and recognises the interactions between cognition and action (see Table 1), these being intuiting and interpreting at an individual level, interpreting and integrating at the group level, and institutionalising at the organisation level. Crossan et al. (1999) contended that organisational learning is characterized by two types of status — stocks and flows. Learning stocks exist at each of the three levels, serving as inputs to one learning flow and outcomes of another. According to Bontis, Crossan and Hulland (2002), learning stocks at an individual level refer to “individual competence, capability and motivation to undertake the required tasks”; learning stocks at a group level refer to “group dynamics and the development of shared understanding”; learning stocks at an organisation level refer to “alignment between the non-human storehouses of learning including systems, structure, strategy, procedure, given the competitive environment” (pp.443-444).

Crossan et al. (1999) identified two categories of learning flows. Feed-forward learning flows refer to new introduced knowledge where behaviours shift across levels from the individual to the group and then to the organisation. Feedback learning flows refer to existing knowledge and behaviours transferred across levels from the organisation to the group and then to the individual. These two types of learning flows coexist within an organisation and generate a tension between them, corresponding to the tension between knowledge exploration and knowledge exploitation (March, 1991).

With these four learning constructs (intuiting, interpreting, interpreting and institutionalising), three learning stocks (individual, group, and organisation) and two learning flows (feed-forward and feedback), organisational learning can be linked with strategy process. Organisational learning may, on the one hand, modify the strategic cognitive structures within an organisation at each level (Chakravarthy and White, 2002). On the other hand, the strategic cognitive structures (i.e., dominant logic) can shape strategic decisions and serve as a foundation of “organisational intelligence” that captures an organisation’s capability for learning (Bettis and

Prahalad, 1995). In other words, a strategy process can coexist with an organisational learning process, with strategic decision-making interacting with organisational learning.

3. The Board and Strategy Process

The extent of board involvement in strategy has been a theme in both theoretical and empirical studies. The traditional perspective suggests that boards have only a limited or passive role regarding corporate strategy. The main function of the board, according to this view, is to monitor the strategic decisions made by senior managers (e.g., Fama, 1980). However, commentators have urged the board to play a more active role. For instance, Zahra (1990) argued that board members should increase their contributions to corporate strategy. Millstein (1995) suggested that involvement in the early stages of strategic planning could help the board to understand the strategic plan and more effectively monitor management performance. In contrast, Oliver (2000) contended that most boards act as neither a rubber stamp nor a dominant player in relation to corporate strategy – a view supported by several empirical studies.

Stiles (2001) indicated that the board's functions related to strategy are setting the "strategic context" and "maintaining the strategic framework". The former function refers to positioning the company and establishing its vision and mission. The latter refers to "gate-keeping", "confidence building" and selecting a chief executive. Gate-keeping is a screening mechanism to ensure that proposals submitted by top management are within the existing strategic framework. Confidence building refers to the discretion held by the board that influences the extent to which an organisation may carry out activities involving transformation or renewal. Selecting a CEO is another alternative where boards can exercise their strategic control by choosing the "right" person for the key post in the organisation. Stiles indicated that the board has significant influence in shaping the direction of managers' strategic behaviour but board members do not become involved in details of the strategy.

A recent study conducted by Siciliano (2005) employed three variables to gauge the board's involvement in strategy. These variables refer to the strategic planning process, making new strategic decisions and evaluating prior strategic decisions. Consistent with Oliver's (2000) view, Siciliano's findings revealed that the extent of board participation in the formal strategic planning process is "at the mid-range". Other studies have also tried to describe or prescribe the nature and extent of boards' involvement in a strategy process (e.g., Nadler, 2004; Tashakori and Boulton, 1983; Zahra, 1990). They all reflect Oliver's view that the board should be in a middle position when it deals with strategic issues. As suggested by Nadler (2004), "the board participates in the strategic thinking and decision-making processes, adding value but not infringing on the CEO's and executive team's fundamental responsibilities" (p.27).

Among the many different classifications of the role of the board, the control, service, and strategic roles are the most popular in the corporate governance literature (e.g., Zahra and Pearce, 1989). According to Hendry and Kiel (2004), the role of the board is divided into two major categories — control and service roles. Hendry and Kiel argued that the strategic role of the board is concerned only with strategic control

and is part of the control role (or compliance role). However, not all components of board involvement in strategy are consistent with control or compliance. Many writers include strategic thinking, such as vision- or mission-building, as an element of board involvement in strategy. Ingley and van der Walt (2001) indicated that current organisations require board members with competent “strategic vision and leadership” skills and board contributions such as strategic “direction-giving”. According to Garratt (2003) “strategic thinking” is the proper function for the board in dealing with strategic issues, while Nadler (2004) has advocated that board members be active participants in strategic thinking.

In our view, boards engaged in strategic thinking are closer to providing a strategic consulting service to the management team rather than simply monitoring a firm’s performance or its strategic behaviour. Boards of small or high-tech firms, in particular, provide this service (Forbes and Milliken, 1999). In other words, strategic control cannot fully describe the strategic role of the board. Accordingly, board involvement in strategy comprises two components. The first is the strategic service that is part of the board’s service role, such as providing the “business definition” (Stiles, 2001) or “strategic thinking” (Garratt, 2003). The second component is the strategic control that is part of the board’s control role, such as “gate-keeping” and “confidence building” (Stiles, 2001).

4. The Board and Organisational Learning

As discussed in Section 2, a strategic decision-making process typically is coupled with a learning process within an organisation. The board members may influence organisational learning, including both learning flows and stocks, while they make strategic contributions to the company.

4.1 Boards’ Influence on Organisational Learning Flows

In the following analysis Crossan et al’s (1999) “4i” learning framework (see Table 1) is used to demonstrate the board’s influence on organisational learning with regard to its involvement in strategic decision-making. The board can influence organisational processes at each stage of the “4i” learning framework, through feed-forward and feedback learning flows.

4.1.1 Feed-Forward Learning Flows

Feed-forward learning refers to generating new ideas or gaining knowledge. Intuiting, which represents the first stage in the feed-forward learning process, is defined by Crossan et al. (1999) in terms of expert and entrepreneurial intuition. Expert intuition focuses on past pattern recognition, while entrepreneurial intuition concentrates on identifying novel relationships as well as detecting future opportunities. Entrepreneurial intuiting tends to generate new insights that relate to the organisation’s vision. An organisation’s vision generally conveys its core ideology and envisioned future, which contains a great prospect together with its dreams, hopes, and aspirations (Collins and Porras, 1996). Since one of the board’s prime tasks is setting the firm’s future direction (Stiles, 2001), the board may make a significant contribution at this stage when there is a need for reshaping the vision. Moreover, a firm’s vision refers to a “guiding philosophy” including core values and

beliefs as well as corporate purpose. As such, a vision is an influential means for shaping organisational learning in the event of significant environmental change (Collins and Porras, 2000; Dierkes, Marz and Teele, 2003).

At the vision-shaping stage organisational learning requires active “attending” by organisations to their internal and external environmental conditions (Zietsma, Winn, Branzei and Vertinsky 2002). When the board serves as a boundary-spanner that moderates environmental uncertainty by supplying information to top management (Zahra and Pearce, 1989; Stiles, 2001), it also facilitates organisational learning by injecting new ideas into the organisation. By way of environmental scanning, organisations are able to modify their vision and re-establish strategic focus to cope with environmental change. As suggested by Rindova (1999), board members can bring a broader range of information into the firm during its strategic decision-making process. In particular, boards with a diverse composition or a range of different skills often contribute new information and different ideas to the organisation. In this respect boards may contribute to organisational learning by enhancing the process of intuiting or attending.

At the second stage in the feed-forward learning process, interpreting is defined by Crossan et al. (1999) as a social process that generates communal knowledge by employing specific language to develop cognitive maps. If an organisation’s novel vision reflects its new insights, the next step is to make the novel vision tangible to reveal its value and purpose by means of setting a mission statement. Setting the mission of a company is another primary function of the board, according to Stiles (2001). A mission statement interprets an organisation’s vision in terms of its goal priorities and resource allocation. At this stage the board can also have significant influence on organisational learning through offering fresh ideas by way of open and candid discussion (Lorsch, 1995). The interpretation of a novel concept within an organisation requires supporting power. The board often has appropriate sources of power for support at the interpreting level, such as holding scarce resources, applicable knowledge, or suitable social skills (Lawrence, Mauws, Dyck and Kleysen, 2005).

Rindova (1999) argued that boards can bring more diversity of perspectives and representatives of complexity that facilitate “best alternatives” for decision-making. He indicated that the board is the source of the “external variety”, “requisite variety” and “representative variety” of a firm. External variety refers to the distinct frames of reference or mental models of board members, in contrast to those of the managers of the organisation or its industry. Requisite variety denotes the role of board members in challenging the routine thinking of managers and providing or stimulating multiple perspectives of interpretation in the process of strategic decisions concerning the complex and changing environment. Since cognitive biases and simplification mechanisms frequently exist in managers (Barnes, 1984; Schwenk, 1984), boards can play a role in counter-balancing this propensity. Representative variety signifies the various stakeholders’ interest in an organisation. By expanding the representation of different stakeholders, boards can facilitate the understanding of the interests and concerns surrounding organisations (Rindova, 1999). Hence, while board members enhance high-quality decision-making, they also facilitate organisational learning through their different sources of power.

Integrating is the third stage of the feed-forward learning process. Crossan et al. (1999) maintained that at this stage conversation and discussion can be useful mechanisms for the group to develop new meanings with shared understanding. While boards are shaping the content, context and conduct of strategy (McNulty and Pettigrew, 1999), they facilitate organisational learning by debating and questioning proposals submitted by top management, instead of simply accepting or declining them (Tainio et al., 2003). Thus, in addition to bringing new ideas, the board's open and frank discussion is a good channel to build consensus within an organisation. However, Lawrence et al. (2005) indicated that integration of new ideas within an organisation may be difficult to attain through group activities that fail to concentrate on a span of shared assumptions or beliefs. Consequently, integrating new ideas into collective actions requires power, such as formal authority, that guides members to restrict their alternatives within the boundaries of the vision and mission. As suggested by Stiles (2001), a major function of the board is "maintaining the strategic framework" which includes "gatekeeping" and "confidence building". Hence, boards have the legitimate power and responsibility to facilitate organisational learning at the integrating stage by focusing new ideas within the domain of the existing vision and mission.

According to Crossan et al. (1999), organisational learning will result in changing as well as creating new institutional factors (e.g., organisational systems, structures, procedures) at the final, institutionalising, stage of the feed-forward learning process. In other words, new ideas are reflected in modified or new organisational strategies, routines and practices. Before new ideas are institutionalised, they must be evaluated, tested and accepted by organisational members. Rindova (1999) argued that boards should be involved in strategy making and helping top management to manage complex and uncertain affairs. This means that the board's participation in strategic decisions could support organisational learning by facilitating the formation of new systems or strategies. Moreover, as suggested by Coulson-Thomas (2004), the board can encourage knowledge creation and diffusion in an organisation by setting up formal reviewing mechanisms or introducing incentive arrangements. Although it is the top managers who are in charge of managing the firm, the board may suggest and approve a policy of promoting organisational learning or knowledge creation and monitor its achievement with incentives used to support its implementation. Organisational learning and knowledge creation then become strategic tasks when the board evaluates top managers' performance. In this way, boards can create a climate of organisational learning through reorientation of institutional factors.

4.1.2. Feedback Learning Flows

Institutional factors — such as organisational systems, structures, routines, and cultures — represent learning stocks at an organisation level (Bontis et al., 2002). Once new ideas are institutionalised, they may endure for a considerable period of time. It is comparatively uncommon to alter these institutional factors in an organisation (Crossan et al., 1999). As discussed in Sub-section 2.2 and implicit in Table 1, feedback learning flows backwards through the organisation, group and individual levels via the processes of institutionalising, integrating, interpreting and intuiting. Institutional factors serve as mechanisms to direct individual and collective decisions and actions within an organisation's boundaries and play an important role

in feedback learning. As institutional factors influence both the cognition and behaviours of organisational members, feedback learning reinforces learning stocks at each of the three levels (Vera and Crossan, 2004). The board may influence feedback learning through its control role, including its strategic control activities. Since a firm's control system defines its budget and strategic behaviour, the risk focus determined by the board may affect the content and the process of the control system. Under a tight control system, the organisation tends to undertake feedback learning rather than feed-forward learning. Nevertheless, feedback learning is as important as feed-forward learning. Without feedback learning, new ideas or knowledge cannot sustain or be stored in the organisation.

4.2. Boards' Influence on Organisational Learning Stocks

A firm's strategic cognitive structures at different levels can be influenced by the board through facilitating or limiting organisational learning processes. Alternatively, boards can have a direct influence on the learning stocks at the organisational level (the strategic cognitive structures of the organisation). As mentioned in Sub-section 2.1, the strategic cognitive structures denote shared understanding at the organisational level, which are especially influenced by the top managers' mental models. The board may change top management's mental models by challenging the assumptions behind their decisions or their belief systems (Tainio et al., 2003). However, changing top management's mental models is difficult and, in extreme cases, is achieved by changing the CEO or top managers in a process of "unlearning", (Hedberg and Wolff, 2003). Consequently, the board's influence on the strategic cognitive structures may not only affect subsequent decision-making processes but also impact on the organisation's ability to learn, which is reflected in the organisational learning process.

4.3. Influence of Board Characteristics on Organisational Learning

Based on the assumption that board composition is a conditioning factor in strategic change (Golden and Zajac, 2001; Goodstein and Boeker, 1991), we have selected five characteristics of boards from the corporate governance literature. These characteristics are board diversity (Forbes and Milliken, 1999; van der Walt and Ingley, 2003), the role of the board (Johnson et al., 1996; Tainio et al., 2003; Zahra and Pearce, 1989), the power of the board in relation to top management (Pearce and Zahra, 1991; Tainio et al., 2003; Westphal and Fredrickson, 2001), the board's ability to access information about the organisation (Hendry and Kiel, 2004; Tainio et al. 2003) and the maximand of corporate governance (Licht, 2004). Although not exhaustive, we consider these characteristics to be sufficiently representative to illustrate their potentially diverse effects on organisational learning (flows and stocks), with useful implications for strategic change.

With regard to board diversity, organisational learning often takes place on the basis of two conflicting activities — diversity generation and consensus building — and requires maintaining both activities in balance (Fiol, 1994). This implies that the development of new knowledge begins with different intuiting and interpretation and ends with shared integration and institutionalisation. According to Forbes and Milliken (1999), boards are workgroups that are confronted with strategic issues. Milliken and Vollrath (1991) suggested that groups with a diverse composition are

likely to collect more information and tend to offer different interpretations of the environmental stimuli. They argued that such groups will perform better in an unpredictable or turbulent environment. Therefore, diversity in a workgroup can enhance feed-forward learning and challenge the existing strategic cognitive structures. Conversely, homogenous groups are inclined toward the “groupthink” phenomenon where they are prone to restrict different opinions or discussions and move toward a view or conclusion under the current belief system. This suggests that homogeneity in a workgroup may support feedback learning and reinforce the existing strategic cognitive structures. In the literature, the categorization of board diversity includes age, gender, ethnicity, professional discipline, independence, culture, industry background, and religion (van der Walt and Ingley, 2003). Some empirical studies have reported that differences in board diversity may have a significantly distinct influence on strategic change (e.g., Golden and Zajac, 2001; Goodstein and Boeker, 1991). According to this view, diversity in board composition will result in differences in the extent to which existing strategic cognitive structures are challenged and in the consequent impacts on organisational learning.

The second characteristic is the role of the board which is categorised as the service role and the control role. In its service role the board is expected to bring new ideas and different perspectives from outside the organisation, for instance, through boundary-spanning activities by board members with specific skills, expertise or networks, from which they can contribute different opinions and views (Zahra, 1990). Stiles (2001) stated that boards can inject distinct strategic information into the firm when they engage in their boundary spanning activity. All of these factors will facilitate feed-forward learning. As feed-forward learning tends to challenge existing belief systems, it encourages change in the strategic cognitive structures of the firm.

We have argued in Section 3 that the control role of the board is not only to monitor the financial performance of the firm but also to supervise top managers’ strategic behaviour (Hendry and Kiel, 2004). The activities of control and compliance will reinforce both cognition and the actions of organisational members within existing organisational norms, assumptions or cultures, empowering institutional factors that support feedback learning. As feedback learning tends to maintain existing belief systems, it will rarely challenge the strategic cognitive structures of the firm.

The power of the board in relation to top management represents the third characteristic. Lawrence et al. (2005) argued that power and politics are essential for the learning processes within an organisation. In other words, without the support of internal power and political coalitions, organisational learning processes are not likely to occur. Organisational learning may result in changes in organisational strategies or structures, which can involve resources and power redistribution within an organisation. As suggested by Tainio et al. (2003), promoting organisational learning often contains debates and challenges between a board and top management. Thus, power and politics are an important part of the organisational learning process and their function in this context should be understood. However, strong boards may also impede organisational learning. A strong and compliance-oriented board will focus on feedback learning and reinforce the strategic behaviour of the firm within current belief systems. In this situation the board makes it difficult for the firm to accept new ideas or changes and becomes a barrier to feed-forward learning. Thus, changing the existing strategic cognitive

structures of a firm depends on the interactions of these two types of learning flows that can be facilitated by the board of directors. Conversely, if boards are weak, acting merely as a rubber stamp, it is impossible for them to facilitate organisational learning, whether feed-forward or feedback learning.

The fourth characteristic is the board's ability to access information from within the organisation. According to Tainio et al. (2003) the board's ability to access information is crucial to organisational learning. In order to facilitate feed-forward learning, such as evaluating the relationship between internal competencies and those of the competition, boards rely on the quality of information obtained from top management. Moreover, when board members intend to introduce experience or knowledge from outside they need access to information regarding the absorptive capacity¹¹ of the firm. Likewise, for the board to monitor organisational performance in its control role, access to relevant information is also important. In this regard, adequate access to information can support the board's control role to enhance feedback learning. Without adequate access to information it is difficult for the board to influence organisational learning processes. If the board is unable to access the information it needs, then neither feed-forward nor feedback learning can be facilitated. Again, changing the existing strategic cognitive structures of a firm depends on the interactions between these two types of learning flows that are facilitated by the board of directors. Whether or not the existing strategic cognitive structures may change is determined by which type of flow is stronger.

The last characteristic is the maximand of corporate governance. According to Licht (2004), strategic decision-making is influenced by individual values and culture. Licht asserted that the debate around different maximands of corporate governance stems from factors such as "value emphasis" and "the need for cognitive closure". He argued further that an orientation of shareholder value-maximization reflects a societal emphasis on factors such as autonomy, hierarchy and mastery, while stakeholder-orientated governance denotes community emphasis on embeddedness, egalitarianism, and harmony. As a result the stakeholder-oriented approach provides a more diverse source of opinions and views from different interest groups and will encourage more environmental scanning than the shareholder-oriented approach. In addition, to interpret environmental stimuli the stakeholder perspective may generate more alternative interpretations than would an exclusively shareholder perspective. Hence, the stakeholder-oriented approach is likely to facilitate more feed-forward learning, thereby challenging existing strategic cognitive structures. For example, Cummins, Motorola, and Shell have obtained new knowledge in different ways and changed their strategies, structures and cultures through learning processes that interacted with various stakeholders (Post, Preston and Sachs, 2002). Conversely, the shareholder-oriented approach may be more constrained by a profit orientation. This is especially likely when managers with tenure are assessed in line with maximizing shareholder value, which will push them to focus more on short-term profit or on exploitation of old certainties and to maintain existing strategic cognitive structures.

5. The Board's Influence on Strategic Change through Its Impacts on Organisational Learning

As discussed in Sub-section 4.3, the different characteristics of the board can have

different impacts on organisational learning with regard to feed-forward learning and feedback learning, respectively. We have argued that to bring about strategic change, both feed-forward learning and feedback learning are important. When feed-forward learning is dominant, feedback learning can support feed-forward learning (Katila and Ahuja, 2002). Alternatively, when feedback learning is dominant, this can hinder feed-forward learning (Levinthal and March, 1993). In order to facilitate strategic change, sufficient energy is required to fuel both feed-forward learning and feedback learning. However, feedback learning should not dominate over feed-forward learning. Thus, both the control role and the service role of the board are crucial to modern organisations for organisational learning, especially in a changing environment. Again, the board's control role should not dominate over its service role. Moreover, boards can support organisational learning only if they have appropriate power in relation to top management. Furthermore, access to relevant information is also important. Without power and information, it is impossible for the board to perform effectively its control role or its service role. In the board's multiple roles, having strong power in relation to top management, together with adequate access to company information, will facilitate both feed-forward learning and feedback learning.

We have also argued that diversity in board composition will facilitate feed-forward learning and homogeneity in board composition will facilitate feedback learning. Assuming a board actively plays both control and service roles and has strong power and adequate access to essential company information, we have posited that diversity in its composition will more easily facilitate strategic change via relatively stronger feed-forward learning flows, than will homogeneity among its members. Moreover, we have contended that boards that pursue maximization of shareholder value will tend to facilitate feedback learning while boards that pursue maximization of stakeholder value will tend to facilitate feed-forward learning. In addition, we have argued that boards that pursue maximization of stakeholder value will more easily facilitate strategic change via relatively stronger feed-forward learning flows than will boards that pursue maximization of shareholder value.

Figure 2 draws together these arguments in an integrated framework that links the Board, organisational learning and the strategy process. In this framework, strategic change is the result of the interaction (duality) between the strategy process and organisational learning, which is influenced in multiple ways by the various characteristics of the board. This framework thus addresses the research questions presented at the beginning of the paper with regard to the board's influence on both of these processes through its involvement in strategic decision-making, as determined by the particular characteristics of the board.

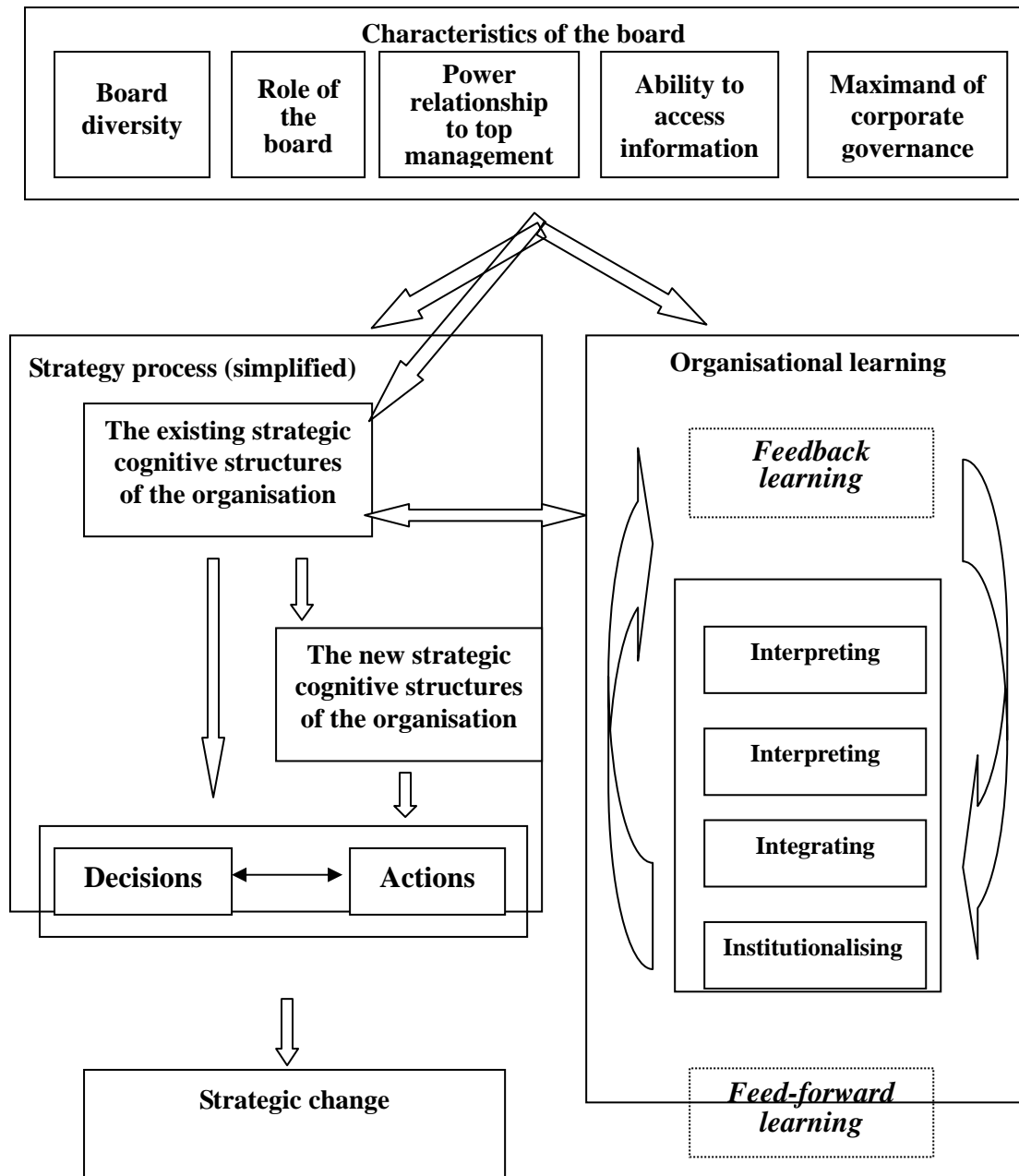


Figure 2: Linking the Board, Organisational Learning and Strategic Change

6. Conclusion

In this study we have developed an integrated conceptual framework that demonstrates a link between the board, organisational learning and strategic change. Based on the evidence from the extant literature relating to this avenue of enquiry, several important conclusions have emerged. First, board members may influence organisational learning while they make strategic contributions to the company. In other words, the board may influence strategic decision-making through its strategic service and strategic control roles. In its strategic service role, the board will contribute to strategic thinking through its input into such key direction-setting tasks as vision and mission building. This contribution will help guide the organisation to make its strategic decisions and form strategies (Stiles, 2001).

Second, when the board participates in strategy formulation, it may influence organisational learning in two ways. One approach is for the board to affect the learning processes of intuiting, interpreting, integrating, and institutionalising through influencing and balancing feed-forward and feedback learning (Crossan et al. 1999; March, 1991). The other is for the board to manipulate the strategic cognitive structures directly by changing top managers (such as in CEO succession).

Third, different board characteristics can have different impacts on organisational learning, influencing both learning flows and strategic cognitive structures within the organisation. Feed-forward learning and challenging the strategic cognitive structures can be encouraged by diversity in board composition, while feedback learning is supported by the board through its influence on the content and process of the organisation's control system.

Fourth, the board's influence on strategic change is determined not only by its impact on organisational learning but depends also on the interplays between feed-forward learning and feedback learning. Strategic change emerges as the strategic cognitive structures of the organisation are changed and a new set of assumptions is rebuilt. Both feed-forward and feedback learning are necessary for new knowledge to be created and embedded within the organisation.

We thus conclude that (1) to support strategic change through organisational learning requires that boards balance both control and service roles, exercising appropriate power in relation to top management and having adequate access to essential company information; (2) boards with relatively higher diversity in their composition are more likely to enhance strategic change by facilitating organisational learning than those that are relatively homogenous; and (3) boards that pursue maximization of stakeholder value are more likely to influence strategic change by facilitating organisational learning than those that pursue maximization of shareholder value.

Our conclusions are based on the assumption that the Board is competent enough to affect the organisational learning process. If Board members are incompetent, neither feed-forward nor feedback learning can be strengthened or reinforced and thus there will be no effect on strategic change. The composition of the Board and the interpersonal dynamics of its members play a key role in relation to Board competence and effectiveness. However, discussion of factors that may influence directors' competence and Board effectiveness are outside the scope of this article and require separate discussion (see e.g. Ingley and van der Walt, 2001, van der Walt and Ingley, 2001, 2003).

The integrated theoretical framework developed in this study provides a dynamic perspective of the strategy process by elaborating on how the board has different impacts on organisational learning and subsequent strategic change. This framework also challenges the 'one-model-fits-all' perspective of the board in highlighting the different influences on organisational learning and the strategy process that result from different board characteristics. As firms face paradoxes such as short-term versus long-term goals and efficiency versus flexibility, boards of directors need to be capable of leading the organisation through these tough

challenges. Boards can enhance their strategic leadership capability by understanding how they might facilitate organisational learning through the strategy process to bring about the strategic change that will meet such challenges. Thus this study not only contributes to understanding the board's influence on strategic change via organisational learning but also suggests its implications for corporate governance with regard to board effectiveness in performing its strategic role.

The framework, however, has several limitations. First, it argues that the board may have a significant influence on organisational learning through its control and service roles. The influence of these roles is dissimilar rather than generalised across boards and across industries. Second, the framework has not explained the difference between tacit knowledge and explicit knowledge and its implications for strategic change. Third, the "4i" learning framework (Crossan et al., 1999), on which it is based, is limited to intra-organisational learning. A discussion of inter-organisational learning requires a more comprehensive learning framework.

Research based on the integrated framework could thus be extended in several ways. One direction is to conduct empirical studies for theory testing through hypothesis-testing of propositions that can be derived from the study. Further theory-building could also be carried out. For example, the board's influence on externalisation of tacit knowledge and internalisation of explicit knowledge could be explored, since these important processes of organisational learning are relevant to the basic assumptions of an organisation and may affect strategic change. However, board involvement in this area is still unclear. Another approach concerns inter-organisational learning through further development and application of the "4i" learning framework. Of value, also, would be an investigation of the influence on organisational learning from board members' network ties beyond the boundaries of the firm.

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ⁱ Maximand refers to the objective function in a mathematical programme where optimisation is defined by maximization (see Mathematical Programming Glossary in <http://home.eunet.cz/berka/o/English/lp/glossary/M.html>). In corporate governance maximand indicates either maximizing shareholder value or maximizing stakeholder value of a firm.

ⁱⁱ Absorptive capacity, according to Cohen and Levinthal (1990), refers to a firm's capabilities bestowed by its existing knowledge to evaluate, assimilate and utilize new knowledge.