FACTORS FOR BOARD EFFECTIVENESS FROM THE PERSPECTIVE OF STRATEGY IMPLEMENTATION: PROPOSAL OF AN INSTRUMENT

Marcio Alves Amaral-Baptista*, T. Diana L. v. A. de Macedo-Soares**, Maria Angela Campelo de Melo*

Abstract

We present a set of factors which can contribute to the effectiveness of boards of directors in managing strategy implementation. Following more recent research strands on corporate governance and boards, we focus on non-structural factors related to cognitive, behavioral, work process and power dimensions. They may enhance the explanatory power of structural features of boards where the latter's effectiveness is concerned. The identified factors are cohesiveness, presence of knowledge and skills, use of knowledge and skills, effort norms, cognitive conflict, task performance and information architecture. They were divided into sets of observable variables, which were consolidated into an instrument - reference lists - with a view to helping scholars and practitioners in assessing how boards rank in these factors.

Keywords: board effectiveness, strategy implementation, board of directors, corporate governance, strategic management

*(M.Sc.; D.Sc. student - IAG Business School, Pontifical Catholic University of Rio de Janeiro)
**(Ph.D.; Full Professor - IAG Business School, Pontifical Catholic University of Rio de Janeiro)
***(Ph.D.; Associate Professor - IAG Business School, Pontifical Catholic University of Rio de Janeiro)

1. Introduction

The world's major corporate governance codes and legislation hold boards of directors collectively responsible for the success of corporations. A prevailing view that boards occupy a central role in modern capitalism is shared by governments, shareholders, regulators, academics and society in general. As a consequence, pursuant to the 2008 global crisis, boards of directors are under severe pressure and scrutiny. The growing emphasis on compliance with regulatory requirements may have narrowed the boards' strategic perspective, reducing risk management activities to a defensive and non-strategic dimension (Kocourek *et al.*, 2004).

The translation of strategic plans into actions is influenced by various factors. Nevertheless, boards are naturally distant from the strategy execution playfield (Mace, 1971, Tashakori and Boulton, 1983). Strategy execution decisions are usually made at several organizational levels away from the boards, in different subsidiaries and geographies. This is especially relevant in the context of global companies, as the actors involved in strategy implementation decisions are substantially influenced by different cognitive, behavioral, political, environmental and social factors. Thus, it is important to understand how boards can ensure that key execution decisions are consistent with planned strategies with a view to adding value.

Several episodes of corporate governance failure have illustrated the boards' distance from the realities of strategy execution. As recently exemplified by international corporations such as Lehman Brothers and Aracruz Celulose (a global pulp and paper company with headquarters in Brazil), boards' work practices may not be effective enough to anticipate, assess and mitigate strategy execution risks.

Ensuring that corporate strategies are effectively implemented is a central management concern because strategy execution failures destroy firm value (Allio, 2005). A recent study performed by the consulting firm Booz & Company revealed that 60% of the value destroyed by firms in their sample resulted from strategic mistakes (Kocourek *et al.*, 2004). Corporate decisions that are not consistent with strategy formulation do not necessarily result from poor governance, but there is a growing consensus that boards must be able to manage strategy implementation activities effectively (Schmidt and Brauer, 2006).

However, this subject has received sparse attention in the literature (Schmidt and Brauer, 2006, Li *et al.*, 2008). This may stem from a somewhat simplistic view on the part of some authors on strategy that considers implementation as a strategic afterthought (Siciliano, 2002). Although some scholars provided indications of how boards can work towards a sound strategic execution, few studies have analyzed these indications systematically to identify influencing factors. There are few integrated models upon which to develop propositions and base future empirical work on the subject. In our view, such a gap in the extant research on corporate governance is critical.

This paper presents results of research that identified a set of factors which may affect the effectiveness of boards of directors in the management of strategy implementation. It also proposes an instrument which can be used to measure the extent to which such factors are present in a board.

Following a more recent line of research, as indicated by Johnson, Daily and Ellstrand (1996), we have focused on non-structural factors of board effectiveness in strategy implementation. Such factors relate to cognitive, behavioral, work process and power dimensions, and may enhance and complement the explanatory power of structural features of boards (such as board size and demographics) where the latter's effectiveness is concerned.

We intend to contribute to the literature on corporate governance and board effectiveness in several ways. First, we attempt to expand the understanding of how boards can play strategic roles. Secondly, we present a set of constructs and observable variables that can be used in the formulation of theoretical propositions and empirical tests. Although the literature provides some characteristics of how boards may perform strategy implementation management tasks, no studies compiled such characteristics in order to define specific factors or constructs. In third place, we provide scholars and managers with an instrument – reference lists - that can be used to assess how boards rank in terms of specific features and work practices that may affect their performance in managing strategy execution.

Our research considered the following delimitations. The level of analysis is the board of directors, understood as semi-autonomous organization structures with specific goals, shared among board members and aligned with corporate objectives. We focused on non-structural dimensions of board effectiveness, since the existing literature on corporate governance has numerous studies on structural and demographic features in detriment of behavioral, social and process dimensions (Huse, 2005, Huse *et al.*, 2005, Amaral-Baptista and Melo, 2009, Macedo-Soares and Schubsky, 2010). Finally, our objective was not to formulate propositions on the nature of relationships among the identified constructs and strategy implementation, organizational performance or other dependent variable.

The paper is structured into six sections including this introduction. Section 2 presents definitions and contextualizes the research's thematic areas. Section 3 presents the research method. The constructs resulting from the research are presented in section 4. Section 5 contains a proposed instrument to measure these constructs. Section 6 concludes the paper.

2. Definition and contextualization of thematic areas of research

Three thematic areas were selected from the results of literature review: (1) board effectiveness; (2) board involvement in strategic management; and (3) board involvement in strategy implementation. We briefly discuss them next.

2.1. Board effectiveness

As important corporate assets (Maassen, 1999), effective boards may provide firms with a competitive edge by influencing organizational performance and creating value through better governance (Nicholson and Kiel, 2004, Charan, 2005). According to Barton and Wong (2006), the effectiveness of a board is related to a firm's cost of capital. A McKinsey & Company research, reported by the authors, revealed that institutional investors are willing to pay a 20-40% premium on stock of firms with effective boards. The notion that boards are by themselves a competitiveness factor has received growing support from different fields of research in corporate governance (Maassen, 1999).

However, defining and measuring board effectiveness is not a simple task (Allen *et al.*, 2004). Board effectiveness precedes and may exert influence on firm performance (Forbes and Milliken, 1999). Forbes and Milliken (1999) proposed that a board's effectiveness may be measured by its task performance, defined as the board's ability to perform its control and service tasks effectively.

Literature suggests that boards have four groups of tasks: monitoring, service, strategy and resource provision. Monitoring is a task supported by the agency theory framework (Fama and Jensen, 1983), related to risk management and shareholder wealth protection. The service task is grounded on stewardship theory (Donaldson and Davis, 1991), comprising advice and support to management (Lorsch and MacIver, 1989). The strategy task comprises activities ranging from strategic direction (Phan, 1998) to management of strategy implementation (Stiles and Taylor, 2001). The resource provision task relates to a board's ability to provide access to resources such as capital, relationships with stakeholders, experience and legitimacy (Ong and Wan, 2008).

Most board effectiveness models present in the literature comprise structural or non-structural dimensions. Structural dimensions relate to demographic board features such as board size, CEO-chairperson duality, director independence and experience, among others. Albeit extensively studied, relationships among a board's structural characteristics and performance are mostly uncertain (Bhagat and Black, 1999) because non-structural intervening factors restrict direct associations among them (Finkelstein and Hambrick, 1996). Studies of non-structural factors are more recent in the literature, covering cognitive (Forbes and Milliken, 1999), behavioral (Huse, 2005), work process (Dulewicz *et al.*, 1995, Huse *et al.*, 2005) and power dimensions (Pettigrew and McNulty, 1995).

More recent board effectiveness models employ structural and non-structural perspectives in a complementary approach. They may be divided into two categories: process and mediation (Ong and Wan, 2008). Process models emphasize non-structural dimensions in an attempt to explain board effectiveness (Pettigrew, 1992). Mediation models of board effectiveness combine the approaches of structural and process models, by the assumption that there are contingent relations among a board's structure, processes and performance.

2.2. Board involvement in strategic management

Literature displays a growing consensus about the importance of boards' role in strategic management (Demb and Neubauer, 1990, Sadtler, 1993, Judge and Zeithaml, 1992, Zahra, 1990, Hoskisson *et al.*, 1999, Pugliese *et al.*, 2009). Several codes of best practice in corporate governance prescribe that boards emphasize strategy tasks (Organisation for Economic Cooperation and Development, 2004, Financial Reporting Council, 2008). There is also a growing body of empirical evidence supporting the involvement of boards with strategic management activities (Demb and Neubauer, 1992, McKinsey & Company, 2006, Stiles and Taylor, 1993, Siciliano, 1990, Golden and Zajac, 2001).

Boards are more actively involved in strategic management for reasons such as higher legal exposure of directors, greater activism on the part of shareholders and other stakeholders, and threats of hostile takeovers (Judge and Zeithaml, 1992). However, their involvement in the strategic agenda is not always perceived as effective, due to impediments such as insufficiency of information (Nadler, 2004) and authority conflicts with managers (Mace, 1971).

The understanding of the multiple ways in which boards may address strategic issues is still incomplete (Hendry *et al.*, 2009), particularly in the behavioral aspects of interactions between boards and management (Nadler, 2004). According to Maassen (1999), academic research has privileged studies of boards' supervisory roles of strategy development. In Charan's view (2005), boards are not supposed to lead the formulation of strategies, but must act decisively to ensure their consistency by means of robust work processes.

2.3. Board involvement in strategy implementation

Several definitions of strategy implementation can be found in literature. However, few of them simultaneously emphasize the roles of top management (Schaap, 2006), process perspectives (Hrebiniak, 2006), behavioral perspectives and environmental influence (Lehner, 2004). We built on the definition proposed by Li et al. (2008) in an attempt to include these aspects. Thus, strategy implementation is here defined as a dynamic, interactive and complex process, comprised of several decisions and activities carried out by boards, top management and employees, affected by interrelated internal and external factors, aimed to convert strategic plans into concrete actions so that strategic objectives can be met.

Although strategy formulation is a task of high complexity, making strategies work is even more complex (Hrebiniak, 2006). Strategic management deviations occur more frequently during implementation than in any other phase (Drew and Kaye, 2007). Thus, given the responsibilities of boards in strategic management, their involvement in strategy implementation management is critical (Brenes *et al.*, 2008) because planning and execution tasks are interdependent (Hrebiniak, 2006).

Boards should expand their monitoring role to explicitly assess the determinants of corporate success and address strategy implementation inconsistencies (Schmidt and Brauer, 2006, Charan, 2005). By doing so, boards will trigger a positive dynamic of strategic interactions with the CEO and senior management, preventing strategic inertia and setting the agenda towards a sound implementation of strategic plans (Schmidt and Brauer, 2006). Thus, boards' involvement in strategy implementation is not only required by their responsibilities towards corporate success, but can also be a management instance of high value creation potential (Charan, 2005).

However, scholars' attention to boards' involvement in strategy implementation has been sparse. Recent literature displays four proposals for board involvement in strategy implementation. Donaldson (1995) developed a strategic audit tool for the use of boards. Its implementation should be carried out by a board's committee assigned to define and monitor strategy implementation performance criteria. The main objective is to embed a formal strategic monitoring mechanism within the organization's governance system. Siciliano (2002) developed a similar tool, employing a balanced scorecard methodology (Kaplan and Norton, 1992). Schmidt and Brauer (2006) proposed that boards should ensure that organizations achieve strategic consistency, defined as the extent of alignment between resource allocation decisions and strategic plans. Drew and Kaye (2007) also proposed a strategic assessment tool for use by boards, aimed to measure the extent to which key initiatives defined at strategic formulation instances are implemented as planned, and the degree of exposure to external factors which may impact a firm's ability to reach strategic goals.

3. Research method

The research method was based on a review of the pertinent literature, aimed to identify a set of constructs and observable variables which may affect the effectiveness of boards in the management of strategy implementation. Bibliographical research focused on the state of the art in the three thematic areas described in section 2. We followed a method outlined in Villas, Macedo-Soares and Russo (2008) with adaptations. This method was chosen because of its potential to help carry out bibliographical research in a more systematic and effective fashion.

Sources were initially selected by structured searches to the EBSCOhost, ProQuest ABI, Business Source Premier, SAGE, Sciencedirect, JSTOR, Wiley Interscience and Google Scholar databases. We searched for publications which simultaneously contained the keywords "board of directors" (or "board") and "strategy implementation" (or "strategic execution" or "strategic implementation" or "strategy execution"). We also made searches with the keywords "board effectiveness". Peer-reviewed articles from high impact factor journals were prioritized. We then searched for additional publications included in the references section of the articles selected initially. We also included seminal articles and articles in which major subjects include board effectiveness or board involvement in strategic management. Theses, dissertations, magazine and newspaper articles were included selectively. Editors' letters, book reviews and non-indexed academic papers were excluded. The limitations of the research method are as follows. We primarily collected publications from the sources contained in the mentioned databases. Thus, some important viewpoints in strategy implementation and boards of directors contained in academic books and essays may have been ignored. However, some of the publications selected use concepts from such books and essays, mitigating this limitation at least partially. In addition, the search method using keywords may have omitted important articles. We believe that the subsequent inclusion of referenced articles and seminal publications helped mitigate this problem.

4. Definition of constructs

We present next the constructs that were identified as a result of the research. We attempt to present operational definitions for each of them, as well as indications of related operational variables present in the literature.

4.1. Cohesiveness

Drawing on Huse et al. (2005), Ong and Wan (2001) and O'Reilly et al. (1989), we define cohesiveness as the ability of a board to work as a collective group, cooperate for consensus and add value by means of openness to diversity of thought, willingness of all directors to contribute and ability to say what they think. Cohesiveness was previously proposed by Forbes and Milliken (1999) as a factor of a board's effectiveness.

Because board tasks are complex and require high degrees of interaction, communication and deliberation, directors must have sufficient interpersonal cohesiveness to execute them well (Forbes and Milliken, 1999). Since most boards meet periodically, their performance may be impaired by low levels of cohesiveness because the nature of relationships among directors is typically weak (Park, 1995).

O'Reilly, Caldwell and Barnett (1989) suggested that a board's effectiveness in strategy tasks is positively related to social integration of directors and consensus. Cohesive boards are expected to display higher levels of cooperation, communication and identification, thus contributing to a better implementation of decisions (Guth and MacMillan, 1986).

Excessive degrees of cohesiveness may be detrimental to a board's effectiveness in some circumstances (Forbes and Milliken, 1999). A highly cohesive board may be distracted by a proliferation of interpersonal exchanges and by groupthink (Mullen *et al.*, 1994). Thus, according to arguments of Janis (1982) and Forbes and Milliken (1999), the optimal functioning of a board in decision making tasks may happen at intermediate levels of cohesiveness. In a different line of reasoning, Byrne (1997) argues that groupthink is more prone to arise in highly cohesive groups in which members display low cognitive conflict; that is, where members tend not to disagree on viewpoints and opinions (cognitive conflict is further described as a construct in section 4.5). Thus, effective boards may be characterized by high cohesiveness and high cognitive conflict.

4.2. Presence of knowledge and skills

Presence of knowledge and skills is defined as the extent to which the knowledge and skills that are required for a board to perform its strategy and control tasks effectively are collectively present in a board. The fact that a given set of knowledge and skills is available in a board does not mean that it will be ultimately used. Thus, following Forbes and Milliken (1999), use of knowledge and skills is defined as a separate construct (section 4.3).

Knowledge and skills relevant to boards are classified by Forbes and Milliken (1999) into two dimensions: functional and organization-specific. Effective boards require that directors have a specific set of functional skills or relationship skills with external networks to obtain information and analyze business issues (Ancona and Caldwell, 1988). Organization-specific knowledge and skills relate to the possession of detailed information about the organization and to a deep understanding of operations and internal management issues (Forbes and Milliken, 1999). Directors must possess explicit and tacit knowledge of internal operations in order to make consistent strategic decisions (Nonaka, 1994, Drew and Kaye, 2007).

Knowing the external environment in which a firm operates is also critically important (McGrath *et al.*, 1995). To perform its strategy tasks effectively, boards must have a deep knowledge of the industry, of the competitive scenario and of environmental influences that may interfere on the focal organization's strategic formulation and implementation.

4.3. Use of knowledge and skills

As mentioned in section 4.2, the ability to use a given set of knowledge and skills is not necessarily related to its presence in a board. Use of knowledge and skills is operationally defined as a board's ability to activate, mobilize and employ the existing inventory of knowledge and skills in order to perform its tasks (Forbes and Milliken, 1999).

The construct refers to the processes by which contributions of individual directors are coordinated, and not to the contents of the contributions. For boards to perform strategic tasks effectively, robust processes must be in place to integrate the existing functional, organization-specific and external knowledge which is available at individual director level (Forbes and Milliken, 1999).

In order to use their knowledge and skills, directors must be capable of influencing other directors. Huse et al. (2005) identified that some directors with high influence in discussions may not necessarily possess the knowledge and skills needed to perform their duties adequately. Thus, they suggest that influence and knowledge should be simultaneously present in the characteristics of an effective director.

4.4. Effort norms

The use of effort norms as a construct which may affect board effectiveness was previously suggested by Forbes and Milliken (1999). Following Wageman (1995), effort norms are a group-level construct defined as the shared beliefs held about the degree of effort that each individual should dedicate to a given task.

Effort norms may be formal or informal. In the context of boards, effort norms may include expectations about values, ethical norms, availability and use of time, extent of authority to evaluate and make strategy implementation decisions independence, and the quality of a board's contribution to strategy implementation tasks (Huse *et al.*, 2005).

Effort norms may influence individual participation and contribution, especially in interdependent workgroups such as boards (Forbes and Milliken, 1999). Effort norms should increase the quantity and quality of directors' efforts (Wageman, 1995), thus contributing to improve the performance of a board. According to Huse et al. (2005), board that display high expectations about the quality of individual directors' effort and interventions tend to perform better in strategy implementation management tasks.

4.5. Cognitive conflict

Drawing on Ong and Wan (2001) and Forbes and Milliken (1999), we employ cognitive conflict as a construct of board effectiveness in strategy implementation. According to Jehn (1995), cognitive conflict is defined as disagreements about the content of tasks being performed, including differences of ideas, perspectives and opinions, as well as disagreements on definitions of workgroup or individual responsibilities. Cognitive conflict may be evidenced by different characterizations of problems and by contrasting points of view about possible responses to problems (Dutton and Jackson, 1987). As interdependent workgroups that deal with complex and ambiguous tasks, boards are especially subject to cognitive conflict (Forbes and Milliken, 1999).

The presence of cognitive conflict in boards may have a positive or negative impact in the management of strategy implementation. On the positive side, disagreements in boards may be conducive to richer and deeper discussions of strategic issues (Forbes and Milliken, 1999). They may lead to an increase of a board's critical investigation ability. This ability may, in turn, induce management to a need to justify, reflect upon and possibly modify their position regarding strategic matters. By discussing several alternative courses of action, boards may benefit from a variety of points of view which will potentially improve decision making.

However, excessive levels of cognitive conflict may have dysfunctional affective consequences. In high degrees, cognitive conflict may trigger negative emotions which may impair the quality of interactions, leading directors to manifest lack of interest and commitment to the board (Mace, 1971, Ong and Wan, 2001).

4.6. Task performance

Task performance is defined as the extent to which boards can perform their tasks effectively (Forbes and Milliken, 1999).

According to Park (1995) and Drew and Kaye (2007), boards that display high performance in strategy implementation tasks have a clearly defined mandate and specific processes to enable their timely and thorough intervention upon the factors that are driving poor firm performance. Other practices noted by them are establishing access paths to managers to gain a “real-life” perspective of barriers to strategy implementation, and assigning responsibility at board level for reviewing and approving high-relevance resource allocation decisions.

To be able to manage strategy implementation issues, boards should take an active part in strategy formulation and in the definition of strategy implementation priorities (Siciliano, 2002, Li *et al.*, 2008). In order to gain added insight on strategy implementation progress and barriers, boards may delegate specific tasks to committees or external consultants, enabling analytical depth and a more efficient use of board time.

4.7. Information architecture

One of the reasons why boards may fail to manage strategy implementation is difficulty to gain access to relevant information (Siciliano, 2002). Boards have specific information needs in order to understand the key issues of strategy implementation, but the amount and nature of information available to them may result in a dysfunctional involvement in such issues. Excessive detail may entangle boards in minutiae and non-strategic discussions. Executive presentations prepared by the CEO may narrow a board’s span of intervention.

Although a review of financial statements may provide insights as to why a given strategic decision has failed, such information may not be enough to provide boards with a clear understanding of operational drivers of strategy implementation deviations. Furthermore, some strategic decisions that yield high short-term financial returns may lead to future negative consequences such as loss of market share and customer dissatisfaction, eroding firm value.

Thus, boards should set up specific processes to manage the progress of the main events of strategy implementation, supported by task-specific tools and metrics (Donaldson and Davis, 1991, Steinberg and Bromilow, 2000, Park, 1995, Siciliano, 2002, Schmidt and Brauer, 2006, Drew and Kaye, 2007).

Siciliano (2002) elaborated on the importance that boards be proactive in defining their specific information needs, in line with strategic management objectives. Siciliano and Drew and Kaye (2007) highlighted the need for boards to prioritize the strategic management dimension in setting their agendas and information needs, as a means to include strategic management in their scope of intervention and decision making. In her case study, Siciliano identified the following information dimensions: financial, service level (customer satisfaction, customer retention, volume of transactions, processing times), physical activity of products and services, human resources training and development, status of progress of key projects and strategic initiatives.

5. Reference lists

With a view to helping scholars and practitioners interested in assessing the performance of boards in factors which may affect the management of strategy implementation, in this section we present reference lists that might be quite useful to that purpose (Table 1).

In line with our research’s delimitations, the reference lists concentrate attention on the most relevant non-structural constructs which may complement the explanatory power of structural features of boards in the strategy implementation management dimension.

The reference lists include sets of related observable variables and metrics as identified in the review of literature. The metrics may be operationalized in Likert or semantic differential type scales. Metrics for expected positive implications are shown in bold type.

The reference lists can be used in several ways. Researchers can develop tools such as questionnaires to capture data to measure the extent to which the compiled factors are present in a board. Boards may employ them in self-assessment sessions to gain valuable insight on behaviors and work practices that need most attention in order to improve the quality of their intervention in strategy execution. External consultants interested in board effectiveness practices may use them in a similar manner.

Table 1. Reference lists - constructs, observable variables and metrics

Observable variables	Metrics	References
Construct: **1. COHESIVENESS**		
1.1. Joint work ability	1.1.1. **High**/Low	Ong and Wan (2001)
1.2. Openness to diversity of viewpoints and opinions	1.2.1. **High**/Low	Huse et al. (2005)
1.3. Willingness of directors to contribute	1.3.1. **High**/Low	Huse et al. (2005)
1.4. Interpersonal attraction among directors	1.4.1. **High**/Low	Forbes and Milliken (1999)
1.5. Social integration among directors	1.5.1. **High**/Low	O'Reilly et al. (1989)
1.6. Consensus	1.6.1. **High**/Low	O'Reilly et al. (1989)
1.7. Feedback and help from other directors	1.7.1. **High**/Low	Shanley and Langfred (1998)
1.8..Groupthink	1.8.1. High/**Low**	Mullen et al. (1994)
1.9. Commitment to implementation of decisions	1.9.1. **High**/Low	Isabella and Waddock (1994)
Construct: **2. PRESENCE OF KNOWLEDGE AND SKILLS (K&S)**		
2.1. Management K&S	2.1.1. **High**/Low	Forbes and Milliken (1999)
2.2. Finance and accounting K&S	2.2.1. **High**/Low	Forbes and Milliken (1999)
2.3. Marketing K&S	2.3.1. **High**/Low	Forbes and Milliken (1999)
2.4. Law K&S	2.4.1. **High**/Low	Forbes and Milliken (1999)
2.5. Strategic perception K&S	2.5.1. **High**/Low	Dulewicz et al. (1995)
2.6. Analytical thinking K&S	2.6.1. **High**/Low	Dulewicz et al. (1995)
2.7. Orientation to results K&S	2.7.1. **High**/Low	Dulewicz et al. (1995)
2.8. Relationship with external networks K&S	2.8.1. **High**/Low	Dulewicz et al. (1995)
2.9. Firm-specific operational and management issues K&S	2.9.1. **High**/Low	Forbes and Milliken (1999); Nonaka (1994); Drew and Kaye (2007)
2.10. Customer needs K&S	2.10.1. **High**/Low	McGrath et al. (1995)
2.11. Sources of business risk K&S	2.11.1. **High**/Low	McGrath et al. (1995)
2.12. Impediments to product/service quality K&S	2.12.1. **High**/Low	McGrath et al. (1995)
2.13. Industry and competitive scenario K&S	2.13.1. **High**/Low	McGrath et al. (1995)
Construct: **3. USE OF KNOWLEDGE AND SKILLS (K&S)**		
3.1. Coordination of individual directors' contributions	3.1.1. **Effective**/Ineffective	Carlson (1998)
3.2. Congruency between directors' K&S and responsibilities/tasks	3.2.1. **High**/Low	Forbes and Milliken (1999)
3.3. Directors' ability to exercise influence on discussions	3.3.1. **High**/Low	Huse et al. (2005)
3.4. Board's ability to mobilize and employ available K&S	3.4.1. **High**/Low	Forbes and Milliken (1999)
Construct: **4. EFFORT NORMS**		
4.1. Similarity of expectations about the quality, intensity and depth of directors' intervention and contribution	4.1.1. **High**/Low	Forbes and Milliken (1999)
4.2. Similarity of understanding of the board's role as final decision maker	4.2.1. **High**/Low	Huse et al. (2005)

4.3. Understanding of the boards' role in ensuring sound strategy implementation	4.3.1. **Uniform**/Non uniform	
4.4. Similarity of expectations about the time directors devote to their board duties	4.4.1. **High**/Low	Wageman (1995)
4.5. Similarity of understanding of directors' independence	4.5.1. **High**/Low	Huse et al. (2005)
4.6. Directors' time dedicated to perform tasks	4.6.1. **Sufficient**/Insufficient	Lorsch and MacIver (1989)
4.7. Uniformity of directors' time dedication to their duties	4.7.1. **High**/Low	Forbes and Milliken (1999)
4.8. Previous preparation for board discussions	4.8.1. **Sufficient**/ Insufficient	Drew and Kaye (2007); Mace (1971); Park (1995)
Construct: **5. COGNITIVE CONFLICT**		
5.1. Diversity of viewpoints and opinions among directors	5.1.1. **High**/Low	Jehn (1995)
5.2. Differences of personality among directors	5.2.1. **High** Low	Huse et al. (2005)
5.3. Interpersonal animosity and tension among directors	5.3.1. High/**Low**	Ong and Wan (2001)
5.4. Disagreements among directors about the content of tasks being performed	5.4.1. High/**Moderate**/Low	Jehn (1995)
5.5. Openness to deal with conflicts	5.5.1. **High**/Low	Jehn (1995)
5.6. Conflict avoidance posture	5.6.1 High/**Low**	Jehn (1995)
Construct: **6. TASK PERFORMANCE**		
6.1. Access to managers and employees to identify strategy implementation issues	6.1.1. **High** /Low	Drew and Kaye (2007)
6.2. Review and analysis of key resource allocation decisions	6.2.1. **Effective**/Ineffective	Drew and Kaye (2007)
6.3. Specific review sessions on implementation of planned strategies	6.3.1. **Sufficient**/Insufficient	Drew and Kaye (2007)
6.4. Specific strategy review and learning sessions	6.4.1. **Sufficient**/Insufficient	Drew and Kaye (2007)
6.5. Engagement of external consultants to subsidize strategy implementation analyses	6.5.1. **High**/Low	Drew and Kaye (2007)
6.6. Engagement in strategy formulation	6.6.1. **High**/Low	Siciliano (2002); Li et al. (2008)
6.7. Robustness of strategy implementation metrics employed by the board	6.7.1. **High**/Low	Steinberg and Bromilow (2000)
6.8. Involvement in key human resources development reviews	6.8.1. **High**/Low	Hrebiniak (2006)
6.9. Timeliness and consistency in addressing poor firm performance issues	6.9.1. **High**/Low	Park (1995)
6.10. Board's authority to monitor and enforce strategy implementation plans	6.10.1. **High**/Low	Park (1995)
6.11. Robustness of strategic risk management tools employed by the board	6.11.1. **High**/Low	Park (1995); Donaldson (1995); Siciliano (2002); Schmidt and Brauer

		(2006); Drew and Kaye (2007)
6.12. Timeliness and consistency in addressing resource allocation inconsistencies vis-à-vis planned strategies	6.12.1. **High**/Low	Schmidt and Brauer (2006)
Construct: **7. INFORMATION ARCHITECTURE**		
7.1. Scope and depth of information sets provided to directors	7.1.1. Excessive/**Adequate/** Insufficient	Drew and Kaye (2007)
7.2. Authority to define information needs and dimensions	7.2.1. **High**/Low	Drew and Kaye (2007)
7.3. Sufficiency of non-financial/operational information, dimensions and metrics analyzed by directors	7.3.1. **Sufficient**/Insufficient	Drew and Kaye (2007)
7.5. Use of board-specific assessment/measurement tools to assess strategy implementation progress	7.4.1. **Yes**/No	Siciliano (2002)
7.5. Ability to define board meetings' agenda – topics, scope, format of information	7.5.1. **High**/Low	Drew and Kaye (2007)

6. Discussion and concluding remarks

In spite of the growing emphasis on the importance of corporate governance to ensure that strategic objectives are met, the proposition of tools that may help understand how boards can effectively perform this role has received limited attention.

With basis on a review of the literature on three thematic areas – board effectiveness, board involvement in strategic management, and board involvement in strategy implementation –, we identified seven key factors or constructs of board effectiveness in strategy implementation: cohesiveness, presence of knowledge and skills, use of knowledge and skills, effort norms, cognitive conflict, task performance, and information architecture.

We also identified several related observable variables and metrics to draft reference lists; that is, an instrument to support analyses of how boards of directors measure in each of the factors. To our knowledge, no previous studies proposed a similar approach and tools to assess non-structural factors of board effectiveness from the perspective of strategy implementation.

We suggest that the proposed instrument be applied by boards concerned with the issue of strategy implementation. By using this instrument as a checklist, scholars, board members and practitioners may gain additional insights into the non-structural factors that affect the quality of board performance, complementing the structural dimensions that are usually employed to assess board effectiveness.

As to future research, we intend to apply and validate empirically these findings by way of more comprehensive analytical frameworks in companies with multinational/global operations. Another path for future research is a better understanding of how non-structural characteristics and practices of boards may be incorporated into more systematic evaluations of the overall quality of a firm's corporate governance system.

References

1. Allen, M., Renner, C. and English, D. (2004), "Evaluating the corporate board", *Strategic Finance (USA)*, Vol. 85, No. 7, pp. 37-42.
2. Allio, M. (2005), "A short, practical guide to implementing strategy", *Journal of Business Strategy*, Vol. 26, No. 4, pp. 12-21.
3. Amaral-Baptista, M. A. and Melo, M. A. C. d. (2009), "Governança Corporativa: A Contribuição de Múltiplas Lentes Teóricas", in Chauvel, M. A. and Cohen, M. (eds.), *Ética, Sustentabilidade e Sociedade: Desafios da Nossa Era*, Mauad X, Rio de Janeiro, pp. 69-87.
4. Ancona, D. and Caldwell, D. (1988), "Beyond task and maintenance: Defining external functions in groups", *Group & Organization Management*, Vol. 13, No. 4, pp. 468.
5. Barton, D. and Wong, S. C. Y. (2006), "Improving board performance in emerging markets", *McKinsey Quarterly*, No. 1, pp. 74-83.
6. Bhagat, S. and Black, B. (1999), "The Uncertain Relationship Between Board Composition and Firm Performance", *Business Lawyer*, Vol. 54, pp. 921-963.
7. Brenes, E., Mena, M. and Molina, G. (2008), "Key success factors for strategy implementation in Latin America", *Journal of Business Research*, Vol. 61, No. 6, pp. 590-598.
8. Byrne, J. 1997. The best and worst boards: Our report card on corporate governance. *Business Week*.
9. Carlson, R. (1998), "Consulting Boards: The Travelers Insurance internal audit staff taps the organization's knowledge pool to boost quality and productivity", *Internal Auditor*, Vol. 55, pp. 49-53.

10. Charan, R. (2005), *Boards that deliver: advancing corporate governance from compliance to competitive advantage,* Jossey-Bass, San Francisco.
11. Demb, A. and Neubauer, F. (1992), *The corporate board: confronting the paradoxes,* Oxford University Press, USA.
12. Demb, A. and Neubauer, F. F. (1990), "How can the board add value?", *European Management Journal,* Vol. 8, No. 2, pp. 156-160.
13. Donaldson, G. (1995), "A new tool for boards: the strategic audit", *Harvard Business Review,* Vol. 73, No. 4, pp. 99-107.
14. Donaldson, L. and Davis, J. (1991), "Stewardship theory or agency theory: CEO governance and shareholder returns", *Australian Journal of Management,* Vol. 16, No. 1, pp. 49-64.
15. Drew, S. and Kaye, R. (2007), "Engaging Boards in Corporate Direction-Setting Strategic Scorecards", *European Management Journal,* Vol. 25, No. 5, pp. 359-369.
16. Dulewicz, V., MacMillan, K. and Herbert, P. (1995), "Appraising and Developing the Effectiveness of Boards and Their Directors", *Journal of General Management,* Vol. 20, No. 3, pp. 1-19.
17. Dutton, J. E. and Jackson, S. E. (1987), "Categorizing Strategic Issues: Links to Organizational Action", *The Academy of Management Review,* Vol. 12, No. 1, pp. 76-90.
18. Fama, E. and Jensen, M. (1983), "Separation of ownership and control", *The Journal of Law and Economics,* Vol. 26, No. 2, pp. 301.
19. Financial Reporting Council (2008), *The Combined Code on Corporate Governance,* Financial Reporting Council, London.
20. Finkelstein, S. and Hambrick, D. (1996), *Strategic Leadership,* West Publishing Company, St. Paul.
21. Forbes, D. P. and Milliken, F. J. (1999), "Cognition and Corporate Governance: Understanding Boards of Directors as Strategic Decision-Making Groups", *The Academy of Management Review,* Vol. 24, No. 3, pp. 489-505.
22. Golden, B. and Zajac, E. (2001), "When will boards influence strategy? Inclination x power = strategic change", *Strategic Management Journal,* Vol. 22, No. 12, pp. 1087-1111.
23. Guth, W. D. and MacMillan, I. C. (1986), "Strategy Implementation Versus Middle Management Self-Interest", *Strategic Management Journal,* Vol. 7, No. 4, pp. 313-327.
24. Hendry, K. P., Kiel, G. C. and Nicholson, G. (2009), "How Boards Strategise: A Strategy as Practice View", *Long Range Planning,* Vol. In Press, Corrected Proof.
25. Hoskisson, R. E., Hitt, M. A., Wan, W. P. and Yiu, D. (1999), "Theory and research in strategic management: Swings of a pendulum", *Journal of Management,* Vol. 25, No. 3, pp. 417-456.
26. Hrebiniak, L. (2006), "Obstacles to effective strategy implementation", *Organizational Dynamics,* Vol. 35, No. 1, pp. 12-31.
27. Huse, M. (2005), "Accountability and creating accountability: A framework for exploring behavioural perspectives of corporate governance", *British Journal of Management,* Vol. 16, No. S1, pp. S65-S79.
28. Huse, M., Minichilli, A. and Schøning, M. (2005), "Corporate Boards as Assets for Operating in the New Europe:: The Value of Process-Oriented Boardroom Dynamics", *Organizational Dynamics,* Vol. 34, No. 3, pp. 285-297.
29. Isabella, L. and Waddock, S. (1994), "Top management team certainty: environmental assessments, teamwork, and performance implications", *Journal of Management,* Vol. 20, No. 4, pp. 835.
30. Janis, I. (1982), *Groupthink: Psychological studies of policy decisions and fiascoes,* Houghton Mifflin Boston, MA.
31. Jehn, K. A. (1995), "A Multimethod Examination of the Benefits and Detriments of Intragroup Conflict", *Administrative Science Quarterly,* Vol. 40, No. 2, pp. 256-282.
32. Johnson, J. L., Daily, C. M. and Ellstrand, A. E. (1996), "Boards of Directors: A Review and Research Agenda", *Journal of Management,* Vol. 22, No. 3, pp. 409-438.
33. Judge, W. and Zeithaml, C. (1992), "Institutional and strategic choice perspectives on board involvement in the strategic decision process", *Academy of Management Journal,* pp. 766-794.
34. Kaplan, R. and Norton, D. (1992), "The balanced scorecard: Measures that drive performance", *Harvard Business Review,* Vol. 70, No. 1, pp. 71-79.
35. Kocourek, P., Van Lee, R., Kelly, C. and Newfrock, J. (2004), "Too Much SOX Can Kill You", *Strategy+ Business,* No. November, pp. 1-5.
36. Lehner, J. (2004), "Strategy Implementation Tactics as Response to Organizational, Strategic, and Environmental Imperatives", *Management Revue,* Vol. 15, No. 4, pp. 460-480.
37. Li, Y., Guohui, S. and Eppler, M. (2008), "Making Strategy Work: A Literature Review on the Factors influencing Strategy Implementation", *ICA Working Paper 2/2008* [Online]. Available: http://doc.rero.ch/lm.php?url=1000,42,6,20080314094536-BU/wpca0802.pdf [Accessed March 12 2010].
38. Lorsch, J. and MacIver, E. (1989), *Pawns or Potentates: The Reality of America's Corporate Boards,* Harvard Business School Press, Boston, MA.
39. Maassen, G. (1999), *An International Comparison of Corporate Governance Models,* Spencer Stuart, Amsterdam.
40. Mace, M. (1971), *Directors: Myth and reality,* Harvard University Press, Boston.
41. Macedo-Soares, T. D. L. v. A. and Schubsky, A. M. G. (2010), "Contribution of expatriates in the management of subsidiaries to the corporate governance of international firms: the case of vale", *BAR - Brazilian Administration Review,* Vol. 7, pp. 98-114.
42. McGrath, R. G., MacMillan, I. C. and Venkataraman, S. (1995), "Defining and Developing Competence: A Strategic Process Paradigm", *Strategic Management Journal,* Vol. 16, No. 4, pp. 251-275.
43. McKinsey & Company (2006), "What directors know about their companies: A McKinsey Survey", *McKinsey Quarterly, web exclusive* [Online]. Available: www.mckinseyquarterly.com/links/22434 [Accessed March 12 2010].
44. Mullen, B., Anthony, T., Salas, E. and Driskell, J. (1994), "Group cohesiveness and quality of decision making: an integration of tests of the groupthink hypothesis", *Small group research,* Vol. 25, No. 2, pp. 189-204.
45. Nadler, D. (2004), "What's the board's role in strategy development?: Engaging the board in corporate strategy", *Strategy & Leadership,* Vol. 32, No. 5, pp. 25-33.

46. Nicholson, G. J. and Kiel, G. C. (2004), "A Framework for Diagnosing Board Effectiveness", *Corporate Governance*, Vol. 12, No. 4, pp. 442-460.
47. Nonaka, I. (1994), "A Dynamic Theory of Organizational Knowledge Creation", *Organization Science,* Vol. 5, No. 1, pp. 14-37.
48. O'Reilly, C. A., Caldwell, D. F. and Barnett, W. P. (1989), "Work Group Demography, Social Integration, and Turnover", *Administrative Science Quarterly,* Vol. 34, No. 1, pp. 21-37.
49. Ong, C. and Wan, D. (2001), "Board Structure, Board Process and Board Performance: A Review & Research Agenda", *Journal of Comparative International Management,* Vol. 4, No. 1, pp. 3-24.
50. Ong, C. and Wan, D. (2008), "Three conceptual models of board role performance", *Corporate Governance,* Vol. 8, No. 3, pp. 317-329.
51. Organisation for Economic Cooperation and Development (2004), *OECD Principles of Corporate Governance,* OECD Publications Services, Paris.
52. Park, J. (1995), "Reengineering boards of directors", *Business Horizons,* Vol. 38, No. 2, pp. 63-69.
53. Pettigrew, A. and McNulty, T. (1995), "Power and Influence in and Around the Boardroom", *Human Relations,* Vol. 48, No. 8, pp. 845-873.
54. Pettigrew, A. M. (1992), "On Studying Managerial Elites", *Strategic Management Journal,* Vol. 13, pp. 163-182.
55. Phan, P. (1998), "Effective Corporate Governance in Singapore: Another Look", *Singapore Management Review,* Vol. 20, No. 2, pp. 43–61.
56. Pugliese, A., Bezemer, P., Zattoni, A., Huse, M., Van den Bosch, F. and Volberda, H. (2009), "Boards of Directors' Contribution to Strategy: A Literature Review and Research Agenda", *Corporate Governance: An International Review,* Vol. 17, No. 3, pp. 292-306.
57. Sadtler, D. R. (1993), "Brief case: The role of today's board in corporate strategy", *Long Range Planning,* Vol. 26, No. 4, pp. 112-113.
58. Schaap, J. (2006), "Toward Strategy Implementation Success: An Empirical Study of the Role of Senior-Level Leaders in the Nevada Gaming Industry", *UNLV Gaming Research & Review Journal,* Vol. 10, pp. 13-37.
59. Schmidt, S. and Brauer, M. (2006), "Strategic Governance: how to assess board effectiveness in guiding strategy execution", *Corporate Governance,* Vol. 14, No. 1, pp. 13-22.
60. Shanley, M. and Langfred, C. (1998), "The importance of organizational context, II: An empirical test of work group cohesiveness and effectiveness in two government bureaucracies", *Public Administration Quarterly,* Vol. 21, No. 4, pp. 465-485.
61. Siciliano, J. (1990), *The Board's role in the strategic management of nonprofit organizations: A survey of eastern US and Canadian YMCA organizations.* University of Massachusetts - Amherst.
62. Siciliano, J. (2002), "Governance and strategy implementation: expanding the board's involvement", *Business Horizons,* Vol. 45, No. 6, pp. 33-38.
63. Steinberg, R. and Bromilow, C. (2000), "The director's role in strategy development", *Directors and Boards,* Vol. 25, No. 1, pp. 48-51.
64. Stiles, P. and Taylor, B. (1993), "Benchmarking corporate governance: The impact of the Cadbury Code", *Long Range Planning,* Vol. 26, No. 5, pp. 61-71.
65. Stiles, P. and Taylor, B. (2001), *Boards at work: How directors view their roles and responsibilities,* Oxford University Press, Oxford.
66. Tashakori, A. and Boulton, W. (1983), "A look at the Board's role in planning", *Journal of Business Strategy,* Vol. 3, No. 3, pp. 64.
67. Villas, M. V., Macedo-Soares, T. D. L. v. A. and Russo, G. M. (2008), "Bibliographical research method for business administration studies: a model based on scientific journal ranking", *BAR - Brazilian Administration Review,* Vol. 5, pp. 139-159.
68. Wageman, R. (1995), "Interdependence and Group Effectiveness", *Administrative Science Quarterly,* Vol. 40, No. 1, pp. 145-180.
69. Zahra, S. (1990), "Increasing the board's involvement in strategy", *Long Range Planning,* Vol. 23, No. 6, pp. 109-117.