

Top Management Team Diversity and Ambidextrous Organization

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Abstract

Premised on the upper echelons perspective, this paper argues that diverse top management team can facilitate pursuing the two contradictory behaviors at the same time. However, team heterogeneity has the ambiguous natures which may not only facilitate to build paradoxical mental models or cognitive frames, but also harm to exchange information and integrate differential knowledge within top management teams. Hence, this study argued that the most important issue on this research field is to address the dilemma and to find the governance mechanism to effectively manage the dual impact of team diversity on building ambidextrous organizations. This paper suggested that building the social capital among top executives may be a useful way or approach on information sharing and knowledge integrations within senior teams to migrate the disadvantage of team diversity on achieving organizational ambidexterity.

Keywords: Social capital, ambidexterity, top management team

1. Introduction

Over the past decade, one of the increasing themes of strategic management and organizational science is that successful firms possess an ambidextrous organizational structure, generating competitive advantages through revolutionary and evolutionary changes (Tushman and O'Reilly, 1996), and adaptability and alignment (Gibson and Birkinshaw, 2004). The link between an ambidextrous organizational structure and organizational performance was highlighted and empirically examined in related literature on ambidexterity (Jansen et al., 2006). Most studies primarily addressed and explained how to invest resources to balance exploration and exploitation (He and Wong, 2004; Katila and Ahuja, 2002; Yang and Li, 2011). However, few studies have expanded their scope to investigate the drivers of achieving ambidexterity.

Because exploration and exploitation may require fundamentally different and inconsistent architectures and competencies, building an ambidextrous organization appears to be complex and difficult to achieve. Furthermore, the concurrent pursuit and balance of exploratory and exploitative innovation is certain to create paradoxical demands and paradoxical challenges (Gilbert, 2005; Tushman and O'Reilly, 1996). Therefore, understanding how an ambidextrous organization can be built

by what organizational attributes that are required has become a significant issue. A number of studies (Tushman and Rosenkopf, 1996) have begun to consider top management teams (TMTs) as vital to organizational reorientations. Smith and Lane (2005) theoretically argued that the design or composition of a senior executive team is crucial for providing a diverse cognitive frame that can assist the senior team in reconciling the paradoxical challenges caused by organizational ambidexterity. Similarly to existing literature, we suggest that a diverse top management team plays a crucial role in fostering a firm's ability to pursue two contradictory behaviors simultaneously.

However, a number of previous studies argued that a diverse senior team also has disadvantages, the most prominent of which is communication and collaboration process deficiencies between senior team members (e.g., Auh and Menguc, 2005; Bunderson and Sutcliffe, 2002). That is, the diverse characteristics of TMTs may cause unexpected costs associated with inefficient information sharing and dissemination among TMT members. Examples of interpersonal conflict caused by greater group heterogeneity (e.g., Dahlin et al., 2005) have shown that conflicts between group members may impede the sharing and dissemination of information among team members, resulting in solutions that are less than desirable. Based on this argument, we conclude that instead of addressing the simple, direct relationship between TMT characteristics and organizational ambidexterity, the variables that influence this link should be explored.

This study contributes to the emergent dialogue on ambidexterity in two ways. First, our study addresses the conflicting benefits and costs associated with TMT diversity to ambidexterity. From an information-processing perspective, previous studies (e.g. Haleblian and Finkelstein, 1993) have argued that one of the important responsibilities of top executives is processing information; the effective implementation of this task improves firm performance. Hence, this study uses an information-processing perspective to present a brief discussion on how the characteristics and dual nature of TMTs influence the building of an ambidextrous organization. Second, our study explores the role of social capital among top executives on senior team diversity and achieving organizational ambidexterity. According to Nahapiet and Ghoshal (1998), social capital can be used as a key relational resource embedded in exchange relationships, which is likely to increase the level of knowledge exchanged between partners based on the quality of information sharing and the frequency of social interaction. Agreeing with social capital theory, this paper also employs an information-processing perspective to examine how social capital among top executives can reduce the costs of TMT diversity, and thus, intensify the benefits of TMT diversity for achieving organizational ambidexterity.

2. Theoretical background

Previous studies explicitly argued that to achieve long-term survival, firms must be ambidextrous, which enables them to satisfy current demands and simultaneously preparing for future innovations (Benner and Tushman, 2003; Gibson and Birkinshaw, 2004). Tushman and O'Reilly (1996) described such firms as ambidextrous organizations that can exploit their existing competencies and explore new opportunities simultaneously. Benner and Tushman (2003) argued that exploitation is related to efficiency, centralization, and tight cultures, whereas exploration is associated with flexibility,

decentralization, and loose cultures. In other words, pursuing exploration and exploitation simultaneously creates paradoxical challenges because the two types of activities require fundamentally different and inconsistent architectures and competencies. Hence, effectively managing the contradictions of balancing exploration and exploitation has become an important issue. Recent studies addressed this issue by detailing the role of top executives in building ambidextrous organizations. Top executives make decisions regarding the organizational form, culture, and resource allocation processes to enable their firm to explore and exploit simultaneously (Smith and Tushman, 2005; Gibson and Birkinshaw, 2004). As mentioned previously, this paper focuses on the decisive role of top executives, especially TMTs, in establishing a supportive context and managing strategic contradictions.

Smith and Tushman (2005) further suggested that because the structural features of TMTs can create paradoxical cognitive frames, they may facilitate the TMTs' ability to harness the tension of simultaneously pursuing exploration and exploitation, and enable them to balance the strategic contradictions, which is consistent with upper echelon theory (Hambrick, 2007). Generally, upper echelon theory (Hambrick et al., 1996) suggests that TMT composition may form different cognitive frames that provide different mental models for strategic choices, thereby influencing firms' strategic decision making. In literature related to upper echelon theory, researchers argue that diverse TMTs have different types of knowledge and decision-making styles and a greater variety of professional perspectives. Such heterogeneity in perspectives further broadens the scope of collected information, and encourages multiplicity in the solutions proposed for apparent and acute problems (Pitcher and Smith, 2001). This paper assumes that TMT diversity is beneficial to management processes that require substantial judgment and creative thinking, especially those regarding strategic contradictions. Therefore, following recent developments in upper echelon research, this paper suggests that diverse management teams may better manage simultaneous and conflicting demands compared to homogeneous TMTs because a greater combined set of skill, experience, and competency enables them to form paradoxical cognitive frames.

Based on upper echelon theory, demographic heterogeneity or diversity can be viewed as resources because they provide TMTs with multiple perspectives and increased information. Adopting an information-processing view, this paper argues that TMTs with diverse functional backgrounds, experience, and tenures can facilitate the balancing of exploration and exploitation because diverse TMTs have access to more information. TMTs with demographic heterogeneity can directly influence the amount of information available to a team through the variety of team member perspectives, which enables access to a broader range of information sources and minimal information overlap (Dahlin et al., 2005). Broader information without overlaps can create complex mental templates (Collins and Porras, 1997) that enable top executives to accept or embrace rather than avoid or deny the tensions from simultaneously pursuing exploration and exploitation. In addition, diverse TMTs that accept these tensions value information on the tension between exploration and exploitation to identify potential synergies in the strategic contradictions. Thus, top executives can overcome psychological and structural inertia (Geber et al., 2010) to allocate the scarce resources between the strategic

contradictions. Therefore, diverse TMTs have a greater variety of perspectives, which is associated with various skills, and non-redundant knowledge at their disposal, stimulating effective decision making regarding the division of resources between exploration and exploitation (Smith and Tushman, 2005).

Despite the advantages of TMT diversity for managing strategic contradictions, previous studies have indicated that diverse TMTs are accompanied by potential problems primarily driven by social categorization (Tajfel, 1981; Turner, 1987) and interpersonal conflict (Amason, 1996; Knight et al., 1999). Social categorization theory proposes that individuals may categorize themselves and others into social groups, and then seek to bolster their in-group and derogate out-groups to enhance their self-construals. Because of social categorization, heterogeneity may directly suppress information sharing by hindering effective communication and coordination between subgroups (Pelled et al., 1999; Dahlin et al., 2005). Members of teams with identifiable subgroups are less likely to accept ideas from other subgroups, thus reducing the effectiveness of using paradoxical frames to manage strategic contradictions. In addition, members focused on subgroup membership prevent a consensus on exploring one perspective for a shared vision, limiting acceptance of the tension between strategic contradictions. Previous studies (e.g., Knight et al., 1999) have argued that interpersonal conflict is likely to occur in heterogeneous teams, which interferes with the teams' ability to share information and work together effectively. Consistent with previous research (cf. Millikens and Martin, 1996; Stewart and Johnson, 2009), this paper argues that team heterogeneity is both an advantage and a disadvantage, and that some characteristics of heterogeneity may benefit the forming of paradoxical cognitive frames, whereas other characteristics may hinder the sharing of information and acceptance of paradoxical challenges. Therefore, this paper argues that social capital among top executives may play a pivotal role in attenuating the potential problems associated with TMT diversity.

3. The role of social capital among top executives

This paper argues that social capital among top executives is likely to attenuate or exacerbate the potential disadvantages of team heterogeneity while enabling the full exploitation of team diversity for building an ambidextrous organization. Social capital literature (Nahapiet and Ghoshal, 1998; Tasi and Ghoshal, 1998) posits that the relationship between different social entities can generate value through providing greater access to social resources, such as communication, coordination, and cooperation to enhance performance. This paper defines social capital among top executives as the interpersonal relationships of a top executive within a TMT, and the social resources embedded in those relationships. Adopting an information-processing perspective, this paper argues that social capital among top executives enables TMTs to benefit from allowing more open and honest sharing of information (Zaheer et al., 1998) by creating an atmosphere of reciprocity and cooperation to better transfer information (Wu, 2008).

Using the structural, cognitive, and relational dimensions of social capital (Nahapiet and Ghoshal, 1998; Tasi and Ghoshal, 1998; Walker et al., 1997), this paper explains that the intra-TMT social context, represented by the connection, trust, and shared vision between team members, may influence

the dual impacts of TMT diversity on simultaneously pursuing exploratory and exploitative innovations. The structural dimension of social capital reflects the pattern of connections or social interactions among exchange partners. An important aspect of this dimension is that actors can use their location in a social structure when interacting with other actors to obtain information or access specific resources (McFadyen and Cannella, 2004). The key benefit of this form of social capital is connectedness; actors can identify information and accessibility to knowledge sources within a social structure (Jaworski and Kohli 1993). The relational dimension of social capital focuses on the role of goodwill trust, which acts as a governance mechanism for embedded relationships (Uzzi, 1996). A key benefit of trust is the ability to create obligations and expectations regarding the extent of cooperation among exchange partners. The cognitive dimension of social capital reflects the information benefits accrued from a shared code and paradigm between exchange partners. Within a social system, a shared vision determines the appropriate actions and facilitates understanding between actors.

Connectedness. This paper indicates that connectedness among top executives refers to formal or informal personal links between TMT members, which enabled access to other members' disparate experienced, knowledge, and backgrounds. Adopting an information-processing view, connectedness among top executives creates channels for information and knowledge to flow between TMT members. Through sharing and exchanging information, such channels enhance top executives' mutual adjustment and efforts to participate in problem solving (Heide and Miner, 1992). Therefore, close communication between top executives enables them to incorporate different perspectives to form paradoxical frames for allocating resources to both strategic contradictions. When communication channels are present, content-related disagreements regarding the resource allocation to both strategic contradictions enables top executives to recognize their different interpretations, understand the need to reconcile these differences, and identify mutually beneficial solutions to psychological and structural inertia. Additionally, connectedness can facilitate frequent and close communication among top executives, which enables members or subgroups to increase their familiarity with each other, encourages the consideration of different ideas, and develops a common identity for top executives (De Dreu et al., 2000; Uzzi, 1996). These arguments suggest that when top executives engage in close social interaction, TMTs have a greater ability to settle interpersonal conflicts and harness the different perspectives of subgroups or members, which increases the benefits of diversity for building an ambidextrous organization.

Trust. In this study, trust refers to positive expectations regarding the quality of the relationships between TMT members (Mishra, 1996; Tasi and Ghoshal, 1998), where a top executive believes that other TMT members behave beneficially and not opportunistically. Although the various experiences, perspectives, and functions of TMT diversity benefit the fostering of paradoxical cognitive frames, the benefits may be suppressed when TMT members do not allow more open and honest information sharing within the TMT (Zaheer et al., 1998). Previous studies have documented that trust can not only facilitate knowledge flows and information sharing (Yli-Renko et al., 2001), but can also mitigate the negative emotions or conflict within a group (Porter and Lilly, 1996). According to an

information-processing perspective, when trusting relationships develop within a TMT, top executives are encouraged to share and exchange information and knowledge by increasing their disclosure of knowledge and providing others access to their knowledge. On the other hand, previous studies (c.f. Dyer and Chu, 2003) have argued that trust among exchange partners is valuable as a moral control mechanism that minimizes interpersonal conflicts and other negative emotions (Ghoshal and Moran, 1996) and facilitates safe and minimally opportunistic exchange conditions. A heterogeneous team with trusting relationships can reduce the impact of self-construals caused by social categorization and the tension from emotional conflicts that hinder effective communication, coordination, and collaboration. This study is based on the preceding arguments that TMT diversity can facilitate organizational ambidexterity and build an ambidextrous organization through higher levels of trust within the TMT.

TMT's shared vision. This paper indicates that the shared vision of a TMT, which embodies the collective goals and aspirations of senior team members, can act as a bonding mechanism by enabling different senior executives to integrate resources (Larwood et al., 1995; Tsai and Ghoshal, 1998). Several studies have shown that a shared set of goals and values can provide a common language platform, which eliminates the misunderstandings in member communication and increases opportunities for exchanging ideas and resources freely. Based on an information-processing perspective, building a common communication platform among senior team members enables them to share information, exchange their different perspectives, and incorporate opposing views more effectively. Therefore, because top executives acknowledge a shared vision by which they identify, obtain, and combine diverse perspectives on the effects of exploration and exploitation (Simons et al., 1999), they are willing to consider and address the challenges of allocating resources to balance strategic contradictions. In addition, previous studies (Portes and Senesnbrenner, 1993) have indicated that a shared vision contributes to a collective understanding that can ameliorate the potential negative effects of TMT heterogeneity, such as interpersonal conflicts and social categorization.

As mentioned previously, this paper proposes that social capital among top executives moderates the relationship between TMT diversity and organizational ambidexterity; thus, TMT diversity is positively associated with organizational ambidexterity because of the high connectedness of the TMT.

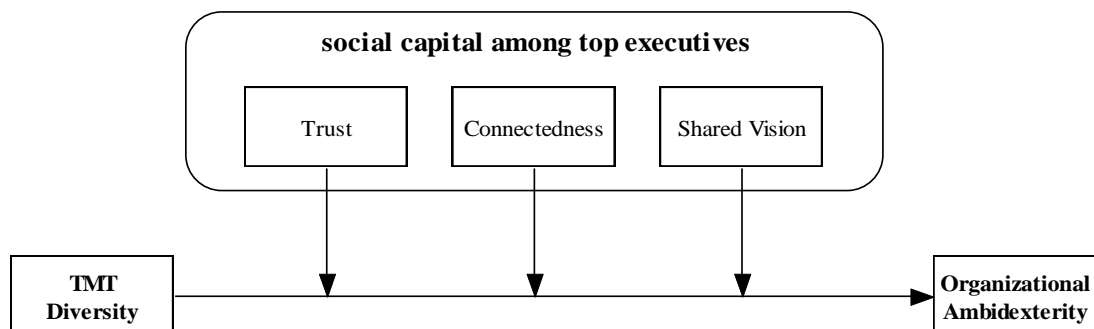


Figure 1. Conceptual Model

4. Discussion

Recent studies (Smith and Tushman, 2005) suggest that the composition of a top management team plays a crucial role in effectively managing contradictions to balance exploration and exploitation. However, few if any studies have explicitly modeled the effect of TMT characteristics on building ambidextrous organizations. Based on an information-processing perspective, this study argues that diverse senior teams can effectively manage contradictions by creating paradoxical cognition rooted in managerial frames and processes that recognize and embrace contradiction. However, previous studies on diversity (e.g., Auh and Menguc, 2005) argued that the heterogeneity of top management teams may increase costs and risks by impeding the sharing and dissemination of information between team members. This study investigated the governance mechanism that facilitates a diverse senior team's engagement in paradoxical cognitive processes that affect organizational ambidexterity. In this contribution, this paper focuses on a previously neglected aspect by showing that social capital among top executives affects the link between TMT diversity and organizational ambidexterity. Based on an information-processing perspective, this study argued that TMT diversity can positively facilitate the building of an ambidextrous organization depending on the social capital among top executives.

Our model confirms that overlooking the governance mechanisms, which can attenuate or exacerbate the potential disadvantages of team heterogeneity and exploit the advantages of team diversity on various cognitive frames and mental models, would result in misleading and ambiguous conclusions on the contributions of TMT diversity for achieving organizational ambidexterity. Thus, considering the roles of social capital among top executives, including connectedness, trust, and shared vision, we suggest that diverse senior teams forming paradoxical cognitive frames can benefit from the social capital among top executives. Regarding the social capital among top executives as a governance mechanism of information processing can also enhance social capital theory by explaining its valuable effects on facilitating information sharing and exchange within a top management team and efficient communication between senior team members.

Our contribution is significant because they further support the two perspectives. First, TMT heterogeneity, as both a disadvantage and an advantage for addressing the paradoxical challenges of pursuing strategic contradictions, may promote the building of valuable mental frames while hindering information sharing and exchange (e.g., Auh and Menguc, 2005; Bunderson and Sutcliffe, 2002; Talke et al., 2010). Second, the social capital among top executives is a valuable resource and a group governance mechanism that can facilitate the acquisition and exchange of different information, enabling top management teams to embrace and manage strategic contradictions when building ambidextrous organizations. The model also enhances literature on the attributes of senior teams in achieving organizational ambidexterity in two dimensions. First, contrary to previous research that focused on the positive aspects of heterogeneous or diverse top management teams (Smith and Tushman, 2005), this paper argued that TMT diversity has ambiguous effects for achieving

ambidexterity when considering an information-processing perspective (Wu, 2008). Second, though previous studies examined the direct effects of senior team attributes on organizational ambidexterity (Jansen et al., 2008; Carmeli and Halevi, 2009), this paper responded to the gap through social capital theory with an information-processing perspective. By providing empirical support of the effects of social capital among top executives, this paper verifies that social capital among top executives contributes indirectly to high organizational ambidexterity by enhancing the effectiveness of TMT diversity.

Regarding the moderating role of social capital among top executives, this study contributes to previous studies on the importance of informal links among top executives for building ambidextrous organizations (Lubatkin et al., 2006). First, Because trusting relationships encourage team members to openly share information and discuss conflicting goals and tasks (Tasi and Ghoshal, 1998), this context is more likely to mitigate the negative emotions and behaviors (interpersonal conflicts or opportunism) within a TMT rather than directly resolve the strategic contradictions caused by implementing spatially exploratory and exploitative activities simultaneously. Based on our model, connectedness may contribute to establishing a conducive context for generating information and knowledge flows among various members, rather than directly achieving ambidexterity. This suggestion is also consistent with that of Hambrick et al. (2008), namely, that senior team members require informal methods of integration when facing significant differences and high interdependency. Third, the shared vision of a TMT provides a common language platform for team members to overcome the adverse effects of divergent goals and conflicting perspectives on implementing strategic contradictions based on collective goals (Jansen et al., 2008), and indirectly increases opportunities for team members to exchange ideas or resources freely to form critical paradoxical cognitive frames. Through the enhanced explanation and empirical assessment of these diversity and governance mechanisms, this paper increases the clarity and understanding of how top executives can effectively manage strategic contradictions to achieve ambidexterity.

5. Conclusion

In conclusion, this study challenges researchers and managers to adopt a more sophisticated assessment of how the composition of top management teams affects organizational ambidexterity. By delineating the dual nature of a senior team's diversity and by showing the moderating effect of social capital among top executives, we believe that our model explains how an ambidextrous organization can be achieved more systematically through the effort of top executives, and provides a more comprehensive account of the complex processes senior team members use to distribute the firm's resources between exploratory innovations and exploitative innovations effectively.

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