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Please refer to the original source for the final version of this work:

<https://doi.org/10.1016/j.lrp.2022.102194>

**The Interface of the Top Management Team and the Board:  
A Dynamic Managerial Perspective**

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**Paper published in *Long Range Planning*. Please cite as:**

RHuynh, K., Wilden, R.M. & Gudergan, S. 2022. 'The Interface of the Top Management Team and the Board: A Dynamic Managerial Perspective ', *Long Range Planning*, vol. 55 (3), 102194.

# **The Interface of the Top Management Team and the Board:**

## **A Dynamic Managerial Capability Perspective**

### **Abstract**

Although top management teams use their human capital, social capital, and cognition (i.e., dynamic managerial capabilities) to drive strategic change in their firms, faultlines within these teams may dampen the strategic change that they produce. While boards can enable but also restrict these change efforts, we know little about how precisely a board's monitoring and advice-giving condition the impact of the top management team's dynamic managerial capabilities on strategic change. We clarify how intense monitoring and advice-giving affect strategic change when faultlines between the top management team's and board's dynamic managerial capabilities are more or less salient. We explain that intense monitoring further stifles both the breadth and speed of strategic change that can be accomplished, and that this is more pronounced when the faultlines between the two bodies are strong. Furthermore, we outline that intensive advice-giving can be beneficial in improving the breadth of strategic change, but more so when these faultlines are weak and less so when they are strong. Notably we illuminate that the reverse happens in terms of speed of strategic change: intensive advice-giving can be detrimental engendering a further dampening of strategic change speed which is more pronounced when these faultlines are strong but less when they are weak.

**Keywords:** Top management team; board; dynamic managerial capabilities; dynamic capability; strategic change; monitoring; advice-giving; faultlines

## **Introduction**

Dynamic managerial capabilities (DMCs) help us understand how a firm's top management team (TMT) affects strategic change (Adner and Helfat, 2003; Hodgkinson and Healey, 2011). They concern the TMT's cognition, human capital, and social capital (Adner and Helfat, 2003; Helfat and Martin, 2015). However, although we learned from strategic leadership and governance research that a firm's board has a significant influence on managerial decision-making in general (Linder and Foss, 2018; Shaikh et al., 2018) and together with the TMT forms the senior leadership of a firm (Finkelstein et al., 2009; Luciano et al., 2020), existing research on DMCs has focused predominantly on the TMT alone, without explicitly considering the important interface between the board and TMT. In this paper, we examine this interface in the context of DMCs and illuminate important ways the board's monitoring and advice-giving affect how DMCs foster strategic change.

Previous research has established the positive effects that a TMT's DMCs may have on firm performance (Adner and Helfat, 2003). A TMT's DMCs influence strategic decision-making and implementation; in turn, these affect the firm's performance via enacting strategic change (Helfat and Martin, 2015). An important attribute of DMCs is that the ways they enable the TMT to engage in strategic change are inseparable from that body's organizational and environmental context (Helfat and Martin, 2015). In particular, their leverage is affected by the board, which provides strategic leadership and governance (Barroso-Castro et al., 2016; Åberg and Shen, 2019). When one further appreciates the little-studied point that the board has its own DMCs (Åberg and Shen, 2019), the DMC perspective affords a unique lens through which to examine the structural affordances and constraints the TMT enjoys or endures in making sense of opportunities as markets change and in seizing and leveraging them when appropriate. A good grasp on these affordances and constraints

helps when formulating actionable resource strategies within a particular organizational context, and when selecting resource configurations to pursue (Martin, 2011).

Consequently, the theoretical advances developed in this conceptual paper offer two major contributions. First, we illuminate the role of the board as an external interface to the TMT when enacting strategic change. Responding to calls in previous research (Wilden et al., 2016), we integrate understanding about DMCs with understanding about strategic leadership and governance and explain how the board variously amplifies or restrains the leverage of the TMT's DMCs to effect strategic change. While some DMC research has focused on the TMT, as noted earlier the TMT does not operate in isolation; its decision making and behaviors are overseen and influenced by its board (Jensen, 1993; Dalton et al., 2007). Board strategic leadership and governance encapsulate *monitoring of* and *advice-giving to* the TMT in determining and implementing critical strategic change. Hence, although the TMT's DMCs enable strategic change, the firm's board influences how the TMT can effectively leverage its DMCs in this context. Specifically, the board's monitoring and advisory roles shape how the TMT's DMCs determine strategic change by conditioning its speed and breadth. In illuminating the ways in which the board's monitoring and advisory roles condition how the TMT's DMCs foster strategic change, this paper introduces and explains the TMT's important external interface with the board in the DMC framework.

Second, we further shape the discussion on diversity in strategic leadership systems (Luciano et al., 2020) and tie this to DMCs. Drawing on the role of faultlines (i.e., divergences in alignment within a group that can produce subgroups), we explain how faultlines both within the TMT and between the TMT and board explain differences in enacting strategic change (e.g., Richard et al., 2019; Cooper et al., 2014). Extending previous literature, which differentiates relationship-oriented (e.g., gender, age, and education) and task-related (also called informational;

e.g., functional background and tenure) faultlines (Richard et al., 2019), we explain how faultlines concerning DMCs within the senior leadership system affect the impact of a board's monitoring and advisory roles on the breadth and speed of strategic change. Therefore, when examining faultlines within the TMT and between the TMT and board we are in fact focusing on faultlines 1) within the TMT's DMCs and 2) between the TMT's and the board's DMCs.

This paper is structured as follows. First, by way of theoretical background we discuss DMCs and the TMT and, separately, how the TMT interfaces with the board. Subsequently, combining these two aspects, we explore how the board strengthens or weakens the leverage of the TMT's DMCs in fostering strategic change. Specifically, and by introducing the effect of DMC faultlines within the TMT and between the TMT and board, we develop a family of propositions. There follows a discussion of the theoretical implications and contributions of our work, an outline of opportunities for future research, and some managerial applications.

## **Top management team and dynamic managerial capabilities**

### **Overview**

A firm's behavior is a reflection of its TMT (Hambrick and Mason, 1984), and previous research has thus discussed the managerial role of resource orchestration (Augier and Teece, 2009). In this context, researchers have examined DMCs to understand the role the TMT plays in influencing a firm's performance in changing environments. DMCs concern the TMT's capacity to modify how firms function and, consequently, encapsulate the critical impact of the TMT on how well firms cope with changing circumstances (Helfat and Martin, 2015). DMCs refer to the "capacity of managers to purposefully create, extend, or modify the resource base of an organization" (Adner and Helfat, 2003; Helfat et al., 2007, p. 24), so that firms are capable of effecting strategic change

(see, for example, Augier and Teece, 2009). DMCs are crucial for the TMT to develop, integrate, and, when necessary, reconfigure and transfer knowledge (O'Reilly Iii and Tushman, 2008); and engage in strategic renewal of their firm (Helfat and Peteraf, 2009). The successful performance of DMCs should not be conceptualized by linking them directly to the performance of the firm (e.g., Helfat et al., 2007; Wilden et al., 2016), but rather using a two-step process that “first traces their impact on intermediate outcomes in the form of strategic change and then assesses the impact of such change on measures of firm performance, such as survival, growth, and financial performance” (Helfat and Martin, 2015, p. 1288). In our paper, we focus on the first step. More specifically, we concentrate on two main mechanisms of the impact of the TMT’s DMCs: (1) speed: the timespan of deciding on and implementing strategic change (Zott, 2003); and (2) breadth: the scope of producing strategic change across the firm’s business activities (Sirmon et al., 2011).

The TMT’s DMCs consist of three elements: the TMT’s cognition, social capital, and human capital. TMTs differ in these three DMC elements, and these differences are likely to lead to different outcomes (Helfat & Martin, 2015). In general, the initiation of a firm’s responses to environmental changes rests on the TMT’s interpretation (i.e., *managerial cognition*) of the environment (Barr and Huff, 1997; Nadkarni and Barr, 2008). Greater cognitive capacity within the TMT will equip the firm to process more diverse information when evaluating and selecting opportunities, thus being able to reconfigure the resource base in more ways (i.e., greater breadth of strategic change) as well as process such information more quickly to facilitate faster decision-making (i.e., greater speed of strategic change). The greater the TMT’s *social capital*, the greater its ability to access (knowledge) resources through relationships and connections (Adler and Kwon, 2002; Blyler and Coff, 2003); this, in turn, affords a firm more diverse insights, which facilitates broader strategic change initiatives (Helfat and Martin, 2015). And not only do the TMT’s social

relationships provide access to resources, but social position can confer power and influence, thereby also facilitating the timely implementation of resource reconfigurations to meet new market opportunities (Martin and Bachrach, 2018). A TMT with greater *human capital* can process and interpret better relevant information and knowledge of prior and emerging conditions in the industry; this, in turn, delivers a better grasp of current dynamics and an enhanced ability to recognize new developments and trends in the industry (Åberg and Shen, 2019). Greater human capital renders the TMT more likely to understand information and make meaningful interpretations from a wider range of opportunity characteristics (i.e., breadth), while also begetting speedier, more comprehensive decisions in the face of change (Martin and Bachrach, 2018). When seizing strategic change opportunities, the TMT tends to rely on past experiences as it alters the firm's resource base (Nielsen and Nielsen, 2011). Without adequate knowledge, the TMT is unlikely to effectively plan and execute strategic initiatives. Hence, like its fellow DMCs, the human capital of the TMT influences both the speed and the breadth of a firm's strategic change.

### **Top management team dynamic managerial capability faultlines and strategic change**

In our theoretical development, we are interested in explaining how differences within the TMT's DMCs relate to strategic change. Research on TMTs has long investigated the impact of team composition and its effect on strategic change (e.g., Bantel and Jackson, 1989; Hambrick et al., 2015). More recently, research has drawn on faultline logic from social psychology to explain how alignment within and differences between subgroups may explain performance differentials (e.g., Richard et al., 2019; Cooper et al., 2014). Faultlines are "defined as hypothetical dividing lines that split a group into relatively homogeneous subgroups based on group members' alignment along with multiple attributes" (Kaczmarek et al., 2012: 338). Previous faultline research has differentiated between relationship-oriented and task-related faultlines (Richard et al., 2019), and



investigated how the alignment of such attributes affects performance (e.g., Earley and Mosakowski, 2000; Li and Hambrick, 2005, Thatcher and Patel, 2012).

Building on this research, we argue that an increasing faultline within the TMT's DMCs – that is TMT members increasingly differ in their perceptions, knowledge, and social connections – leads to an increased diversity in interpretation and use of information underlying decision making and ultimately choice of strategic change options, hence widening strategic change breadth. In other words, members in DMC-based subgroups draw on different DMCs, which provides the TMT with access to greater aggregated knowledge (Gibson and Vermeulen, 2003). Differences in cognition between subgroup members stimulate constructive debate about the imminent task, thereby producing viable alternatives and a better understanding of the feasibility of these alternatives (Carpenter, 2002). Also, faultlines within a TMT's educational backgrounds and experiences (human capital) can enhance the breadth of strategic actions, such as investments in innovation and R&D (Bantel and Jackson, 1989; Barker and Mueller, 2002), introduction of new products and services (Smith et al., 2005), and the identification of market opportunities (Gruber et al., 2012). Lastly, faultlines concerning external networks (social capital) enhance access to the variety of knowledge within the TMT, thus supporting its ability for information processing and, ultimately, increase the breadth of strategic change (Wong, 2008). Thus, increasing faultlines within the TMT's DMCs benefit strategic change breadth as they come with greater access to a larger variety of information, interpretations, and social connections.

Despite the benefits of greater diversity in the TMT's DMCs, it is likely that such diversity can sometimes be too great and come at a cost. That is, as diversity in DMCs increases the TMT may experience more conflicted ideas when it becomes difficult to select strategic change options (Garcia Martinez et al., 2017). For example, studies show that differences in TMT members'

functional background and international experience are associated with divergent mental models, limited information-sharing and conflicting objectives (Dahlin, Weingart & Hinds, 2005; Polzer et al., 2006). This may lead to settling on options, which represent the lowest common denominator, ultimately reducing strategic change breadth. Moreover, given strong intra-TMT DMC faultlines, information shared across subgroups may be misinterpreted due to divergent cognition and human capital, so that comments are viewed as criticisms or threats rather than as constructive critiques (Lau and Murnighan, 2005; Thatcher and Patel, 2011; Thatcher and Patel, 2012), hence further reducing the breadth of strategic change.

Considering strategic change speed, we expect strong intra-TMT DMC faultlines to lower the TMT's speed in making strategic decision. Greater faultline strength amplifies divergence between subgroups within the TMT (Lau and Murnighan, 1998; Kaczmarek et al., 2012; Hutzschenreuter and Horstkotte, 2013). In turn, it can lead to delay in decision-making, conflict, and other problems affecting strategic change (Lau and Murnighan, 2005; Rico et al., 2016; Ma et al., 2021). Hence, a strong faultline within the TMTs' DMCs reduces speed in instigating and executing strategic actions due to a broader and more troublesome gathering and processing of information (Hambrick et al., 1996). Although different voices within the TMT are conducive for the creation of novel ideas, strong DMC faultlines make it difficult to form and act on decisions, which will delay decision-making (Thatcher et al., 2003; Xie et al., 2015). Moreover, as intra-TMT DMC faultlines become stronger, TMTs become more challenged in reaching agreement on which competitive moves should be implemented (Chen et al., 2010), thereby crippling their ability to make decisions in a timely manner. Hence, the reasoning developed in this paper rests on the following two baseline arguments:

*P1a: Intra-TMT DMC faultline strength has an inverted U-shaped relationship with strategic change breadth.*

*P1b: Intra-TMT DMC faultline strength will be negatively related with strategic change speed.*

### **Top management team, the board, and dynamic managerial capabilities**

As the board and the TMT represent the senior leadership system of the firm, the board embodies a key external interface to the TMT, affecting its decision making (Westphal and Fredrickson, 2001). We therefore argue that the impact of intra-TMT faultline strength on strategic change is contingent on the TMT's interaction with the board. Specifically, we consider two important interface-related aspects: inter-TMT-board DMC faultlines and a board's monitoring and advisory roles (Rindova, 1999; Matthias and L., 2008). Although the implications of board and TMT activities have been investigated separately (Díaz-Fernández et al., 2015; Åberg and Shen, 2019), the external interface of the board in TMT decision making has not yet been discussed extensively (Martin and Bachrach, 2018), and scarcely at all within the context of DMCs.

Many of the arguments for the benefits and drawbacks of intra-TMT DMC faultlines also hold for DMC faultlines between the TMT and the board. That is, as the TMT by itself may not have the appropriate DMCs to make and implement strategic change decisions on their own (Eisenhardt and Martin, 2000; Helfat and Martin, 2015), the diversity that comes with DMC faultlines between the TMT and board provides a basis to potentially enable the TMT to benefit from the board's external network (i.e., social capital), knowledge (i.e., human capital), and views (i.e., cognition)(Bjornali and Gulbrandsen, 2010; Knockaert et al., 2015). Through its complementary human capital, the board can make timely information available to the TMT (Zahra and Pearce, 1989), and through its complementary social capital the TMT can extract necessary

resources from its outside connections (Wu, 2008; Barroso et al., 2011). Hence, the expertise and social ties of a board may link the firm's TMT to complementary productive resources and thus assist in making proficient strategic decisions (Berman et al., 2005; Gaffney et al., 2013; Barroso-Castro et al., 2016). However, although weak or strong DMC faultlines between the TMT and the board may characterize the TMT's external interface, the mere existence of such faultlines in themselves is insufficient to produce a difference in how the TMT enacts strategic change. From prior works (e.g., Bezrukova et al., 2009; Georgakakis et al., 2017), we understand that the impact of faultlines is context dependent. We argue that the board's monitoring and advisory roles facilitate how DMC faultlines between the TMT and board affect the TMT in leveraging its own DMCs to enact strategic change in terms of breadth and speed (McNulty and Pettigrew, 1999; Kim et al., 2009).

The *monitoring* role of the board is based on agency theory logic (Jensen and Meckling, 1976), aimed at controlling managerial strategic actions and interpreting the board as "apex of the firm's decision control system" (Fama and Jensen, 1983, p. 311). Monitoring comprises providing incentives to align top management's interests with the firm's interests, ultimately aimed at optimizing shareholder value, as well as activities such as endorsing resource allocation decisions and strategic initiatives (Fama and Jensen, 1983). The *advice-giving* role of the board stems from resource dependence theory (Pfeffer and Salancik, 1978), highlighting the board's input into strategic decision making by sharing their knowledge and competences on strategic issues and by taking an active role in strategy formulation (Salancik and Meindl, 1984; Hillman and Dalziel, 2003; Withers et al., 2012).

In developing our logic, we note several assumptions and key boundary conditions. First, we concentrate on distal outcomes (i.e., strategic change) rather than proximal outcomes (i.e., task

performance) (Luciano et al., 2020). Second, we assume that a firm's TMT has sufficient base-level DMCs to run the firm (i.e., the adverse selection problem is not necessarily paramount) and has a basic interest in supporting the firm and its owners to accomplish its targets (i.e., while the moral hazard problem may not be completely absent, we assume the TMT has at least some pro-firm tendencies). Third, whereas institutional pressures compel boards to engage increasingly in intense monitoring (Boivie et al., 2016), Hambrick et al. (2015) suggest that boards rather dedicate their focus to intense advice-giving. Therefore, our focus is on intense monitoring and intense advice-giving. Fourth, it is important to note that monitoring and advice-giving are not mutually exclusive and may affect each other. For example, a board may monitor the TMT's activities and as a consequence of identified issues provide strategic advice. However, in our reasoning we focus on advice-giving that is not necessarily a direct consequence of monitoring. In summary, in the remainder of this paper, we focus on faultlines in terms of DMCs: 1) within the TMT's DMCs; and 2) between the TMT's and the board's DMCs, and the impact of intense monitoring and advice-giving.

### **Monitoring, top management team dynamic managerial capabilities, and strategic change**

Consistent with diversity research that has discussed the double-edged nature of faultlines (Lau and Murnighan, 2005; Sahaym et al., 2016; Richard et al., 2019), we propose that intense monitoring by the board can strengthen or impede strategic change breadth and speed. Which way the process unfolds will depend on the extent of monitoring and intra-TMT DMC and inter-TMT-board faultlines. We focus on two main mechanisms through which monitoring by the board impacts the leverage of the TMT's DMCs (Bonazzi and Islam, 2007; Boivie et al., 2016): trust and motivation. According to Mayer et al. (1995), *trust* is defined as a willingness to take risks and make oneself vulnerable. Hence, the TMT's trust in the board augments its willingness to openly discuss issues

and cooperate to resolve problems (Westphal, 1999; Klarnar et al., 2018). TMT decisions are further affected by *motivation* (Hambrick and Mason, 1984; Hambrick et al., 2015), which concerns the TMT's eagerness to exert itself on behalf of the board (Hambrick et al. 2015). Whereas engaging in strategic change is already a strenuous undertaking for the TMT (Carpenter et al., 2003; Sahaym et al., 2016), it is even harder when it experiences intense monitoring and has to align its efforts with the, possibly diverging, thinking and demands of the board. It requires the TMT to deeply and effortfully scrutinize available information (through using its cognitive capacity and human capital) and seek additional information (through its social capital) to ensure its DMCs are suitably leveraged to meet the board's demands. In this way, monitoring of the TMT by the board represents an important part of motivating the TMT to leverage its DMCs to the full extent (Hambrick et al., 2015). In turn, it conditions how intra-TMT DMC faultlines influence strategic change breadth and speed (as per P1a and P1b). Modest monitoring by the board, irrespective of whether or not strong inter-TMT-board faultlines exist, will be inconsequential for the TMT's efforts in driving strategic change breadth, as the board's inaction neither affects the TMT's trust nor motivation. However, as the board engages in intense monitoring, trust, and motivation fade such that the TMT's leverage of its DMCs dwindles. In turn, this intense monitoring has a negative impact on the relationships of intra-TMT DMC faultline strength with both strategic change breadth and speed respectively.

Specifically, when inter-TMT-board DMC faultlines are strong and monitoring is intense, we predict the greatest possible negative effect of intra-TMT DMCs faultline strength on strategic change breadth due to both reduced motivation and trust, and likely divergence in foci. In this scenario, boards differ from the TMT in terms of their DMCs and are likely to derive different strategic change interpretations than those by the TMT. That is, whereas a board's monitoring that comes with weak inter-TMT-Board DMC faultlines is conceptually aligned with the understanding

of the TMT, the foci of the board's monitoring will be based on different understanding when inter-TMT-board DMC faultlines are strong. Misaligned monitoring however can further reduce trust and motivation. Specifically, a TMT characterized by strong intra-DMC faultlines, which already faces internal struggles, will experience declining intrinsic motivation spurred by monitoring mechanisms, which may reduce TMT's learning capacity (i.e., cognition) (Frey, 1997). Overcoming these motivational issues is important as strategic change often occurs in situations of environmental turbulence, and this requires the TMT to use their DMCs in an entrepreneurial manner. Significant control by the board of such decision-making may encourage the TMT to seize projects only with relatively safe outcomes in narrow domains rather than embark on projects such as high-risk innovations (Faleye et al., 2011). Thus, if a TMT has strong DMC faultlines, then the presence of intense monitoring by the board may lead the TMT to show behaviors aimed at shorter time horizons and exhibit risk-avoiding behaviors (Hayes and Abernathy, 1980; Hoskisson et al., 1991). Moreover, the TMT may attempt to isolate themselves from the intense monitoring to deal with internal conflict and dissonance, thereby increasing their emotional and cognitive distance from the board due to a lack of trust (Sundaramurthy and Lewis, 2003); ultimately reducing the breadth of strategic change to avoid conflict with the board.

Further, this may lead to increasing levels of task and emotional conflicts, encouraging behavioral disintegration, and driving down motivation to learn from each other (Lau and Murnighan, 2005; Li and Hambrick, 2005; Thatcher and Patel, 2012), ultimately resulting in negative impact on the breadth of strategic change. When boards engage in intense monitoring, TMTs even more so are required to justify their different strategic change interpretations and options. In turn, amplifying the negative impact of strong DMC faultlines between the board and TMT (Rico et al., 2016), ultimately further reducing the breadth of strategic change. Furthermore,

when the TMT assumes that the board considers different strategic change options derived from their own DMCs, requiring different social connections and skills for implementation, the TMT becomes even less motivated to leverage their attention, knowledge, and social ties when considering opportunities for broader strategic change (Adams and Ferreira, 2007; Guldiken and Darendeli, 2016). Finally, the outcome of TMT-board bargaining, under intense monitoring, based on strong faultlines in respective DMCs is likely to result in continuing with the existing strategy (Boeker, 1997; Boeker and Wiltbank, 2005). Guldiken and Darendeli (2016) have shown that board monitoring may increase TMT's risk aversion and decrease their likelihood to invest in risky and long-term initiatives such as R&D investments, thus reducing the breadth of strategic change.

On the other hand, when there is intense monitoring in a situation paired with weak inter-TMT-board DMC faultlines, then we expect the most positive effect of intra-TMT DMC faultlines on strategic change breadth. Weak DMC faultlines between the TMT and board indicate that the two bodies' DMCs are rather similar and, accordingly, have congruent views regarding strategic change opportunities (Zhang et al., 2017). Similarity between the TMT and the board fosters interpersonal attraction and thus greater trust and more frequent and productive interactions (Li and Hambrick, 2005; Petrovic, 2008). That is, when DMCs of the board and TMT are congruent, monitoring is based on similarities in interpretation of information, enhancing breadth in strategic decision making (Robert et al., 2008). With high trust and similarities in perceptions, education, and networks, the TMT is more at ease at trying new opportunities, which ultimately increases the breadth of strategic change (Daboub et al., 1995). Hence, monitoring when inter-TMT-board DMC faultlines are weak can be beneficial to the breadth of strategic change. Extrinsic motivation, together with intrinsic motivation, guides the TMT's behavior (Sundaramurthy and Lewis, 2003; Hambrick et al., 2015; Lim Lee and Ungku Norulkamar Ungku, 2015). The accountabilities put on



the TMT by the board through monitoring produce extrinsic motivation for the TMT to behave in a way that complies with those aspects stressed in the monitoring. However, directing the TMT's attention and behaviors towards important issues improves behaviors of not only a selfish TMT but also a pro-firm one (Goranova et al., 2017); the latter, through channeling desired behaviors. In turn, the TMT leverages their attention, knowledge, and social ties when considering opportunities for broader strategic change, hence increasing the breadth of strategic change.

In summary, the relationship between intra-TMT DMC faultline strength and strategic change breadth is conditioned by both the board's monitoring and inter-TMT-board DMC faultline strength. Therefore, we propose:

*P2a: Strong inter-TMT-board DMC faultlines accentuate the negative impact of intense monitoring on the relationship of intra-TMT DMC faultline strength with strategic change breadth.*

*P2b: Weak inter-TMT-board DMC faultlines lessen the negative impact of intense monitoring on the relationship of intra-TMT DMC faultline strength with strategic change breadth.*

In terms of *speed* of strategic change, we suggest that when board monitoring is intense and inter-TMT-board DMC faultlines are weak, intra-TMT DMC faultline strength will have the most positive effect on strategic change speed. As outlined in P1b, TMTs with weak DMC faultlines benefit from group think and focus more on the team as a whole (Lau and Murnighan, 2005). While this may be negative for strategic change breadth, it can be of benefit to strategic change speed as it encourages a timely exchange of task-related information (Lau and Murnighan, 2005; Richard et al., 2019). Now, if intra-TMT DMC faultlines are strong, in the baseline we would expect a decrease in strategic change speed. However, with weak faultlines between a TMT's and board's DMCs, a

TMT tends to experience less conflict with the board (Polzer et al., 2006) due to similarity in perceptions, experiences, and network. In this case, intense monitoring plays a vital role in overseeing TMT's leverage of its DMCs (Åberg and Shen, 2019). Intense monitoring by a board that is similar to the TMT incentivizes the TMT to not take too much time when deciding on strategic change options. Consequently, intense monitoring by the board can provide guidance and set strict timelines to, ultimately, increase strategic change speed.

However, when board monitoring is intense and inter-TMT-board DMC faultlines are strong, we expect the greatest negative effect of intra-TMT DMC faultlines on strategic change speed. Intense monitoring indicates a lack of trust and blunts the value of social ties across the TMT and board, "turning a cooperative venture into an antagonistic horse trade" (Macaulay, 1963, 43), leading to a lack of communication between the board and TMT. Thus, intense monitoring by the board when inter-TMT-board DMC faultlines are strong will reduce the speed of strategic change. Further, a lack of trust in the board may make the TMT wary of aligning its social connections with the board to the fullest benefit of the firm for fear that these connections be misused (Westphal, 1999; O'Shannassy, 2010). Therefore, when DMC faultlines between the TMT and board are strong, intense monitoring by the board reduces the speed of strategic change. When strong DMC faultlines between the TMT and board exist, more discussions arise due to a greater variety of interpretations and cognitive abilities, differences in social networks, and human capital (Lau and Murnighan, 2005; Friedman et al., 2016; Richard et al., 2019), ultimately slowing down strategic change speed. With strong DMC faultlines between the TMT and board, communication between these two bodies can produce conflicts (Lau and Murnighan, 2005) because of different perceptions, backgrounds, and networks. In the case of intense monitoring, the board is more likely to demand explanations regarding the TMT's strategic change initiatives (McNulty and Pettigrew, 1999). Intense

monitoring of the board can destroy a good working relationship between the TMT and board (Kim et al., 2014). Moreover, intense monitoring even further reduces the speed of strategic change because strong DMC faultlines between the TMT and board exacerbate pluralistic ignorance (a situation where group members are hesitant to voice their concerns either because they fear social distancing from the group or the possibility of the group discounting their intellectual capacity) (Westphal and Bednar, 2005).

In summary, the relationship between intra-TMT DMC faultline strength and strategic change speed is conditioned by both the board's monitoring and inter-TMT-board DMC faultline strength. Thus, we propose the following:

*P3a: Strong inter-TMT-board DMC faultlines accentuate the negative impact of intense monitoring on the relationship of intra-TMT DMC faultline strength with strategic change speed.*

*P3b: Weak inter-TMT-board DMC faultlines lessen the negative impact of intense monitoring on the relationship of intra-TMT DMC faultline strength with strategic change speed.*

### **Advice-giving, top management team dynamic managerial capabilities, and strategic change**

Boards' advice-giving role can further condition the TMT-board DMC interface in strengthening the leverage of the TMT's DMCs to expand the breadth and speed of strategic change by contributing "emotional support for risk-taking, offer[ing] business advice, assist[ing] in negotiations, and aid[ing] in knowledge acquisition; and these consequently enable knowledge integration and interpretation" (Chen, 2011, p. 337). In general, intense advice-giving under weak inter-TMT-DMC faultlines positively affects the TMT in leveraging its DMCs. A board's *cognition* can complement the TMT's processing of available information – especially absent complete

information – in order to assess new developments and trends in the industry (Åberg and Shen, 2019). Effective information processing is the extent to which information is absorbed, interpreted, and used in strategic decision-making (e.g., Boivie et al., 2016; Hinsz et al., 1997).

The board's involvement through giving advice can also offset the processing demands of necessary novel and complex decisions under which the TMT labors (Mintzberg et al., 1976). The TMT's information processing and decision making are influenced by its past experiences as part of its *human capital*, and thus a board with solid expertise through its own human capital can also aid the TMT in analyzing why shortcomings in strategy implementation occur, thus strengthening the TMT in leveraging its cognitive abilities (Zahra and Pearce, 1989; Matthias and L., 2008). The TMT can seek advice from the board (Huse, 2007), which puts it in a good position to evaluate more critically the firm and industry (Åberg and Shen, 2019) when exploring technological opportunities, implementing a business model, shaping markets and market outcomes, and capturing value.

A board's extensive knowledge and experience of both firm-specific and industry-specific developments will lend the TMT greater force in leveraging its DMCs when reading possible threats and opportunities, ultimately widening the breadth of strategic change initiatives (Knockaert et al., 2015). Whereas more diverse groups have greater knowledge and skills to solve complex problems (Li and Harrison, 2008), homogeneous groups are more likely to mire in myopic and faulty decision-making that consequently impedes the critical evaluation of alternatives (Kim et al., 2009). Hence, the more non-redundant information the board provides to the TMT, the more likely the TMT can recombine existing information with current ideas to create something new and thus envision a broader set of strategic change opportunities.

Besides a board's human capital, its external ties (i.e., *social capital*) can also assist the TMT in "accessing strategic information and opportunities, enhancing environmental scanning, and revealing information about the agendas and operations of other firms" (Hillman and Dalziel, 2003). A board's large network of interfirm ties provides the TMT with unique information, more information, and faster access to information; these render the TMT more alert to developments in the firm's operating environment and faster at sensing and seizing potential strategic change opportunities (Heavey and Simsek, 2013). For instance, external networks of the board may offer business advice, assist in negotiations, and aid in knowledge acquisition (Oviatt and McDougall, 1995), and these consequently enable knowledge integration and interpretation, which in turn increase the TMT's abilities to handle complex decisions (Houghton et al., 2009). However, as was the case for monitoring, for advice-giving there is the possibility of having too much of a good thing. In our clarification, we again distinguish situations of weak DMC faultlines between the TMT and board from those characterized by strong faultlines. Advice of potentially significant utility for the TMT can rest on strong inter-TMT-board DMC faultlines and of modest utility on weak faultlines. However, this potential may not necessarily translate into making a difference.

Whereas we put forward in our baseline argument that as intra-TMT DMC faultlines increase the initial positive impact on strategic change breadth lessens, with strong inter-TMT-board DMC faultlines, a TMT tends to experience even greater cognitive overload (Parayitam and Dooley Robert, 2011). When the TMT is burdened by excessive and overly detailed advice about strategic opportunities by the board, and already dealing with differences in DMCs within the TMT, it tends to pay less attention to all the details of the board's advice, hence reducing strategic change's breadth. Attention is a scarce resource: the TMT has finite time, effort, and resources at its disposal and so needs to be selective in what to devote attention to (Cyert and March, 1963).

According to the attention-based view (Ocasio, 1997), a TMT's cognition is, precisely, limited, which affects its ability to prioritize, select, interpret, and act upon board advice. Amidst a surplus of advice, the TMT may be confused further about which parts to follow; defaulting to a focus mainly on habitual information as relevant stimuli and becoming biased towards looking for the familiar (Rindova, 1999). That is, the TMT may tend to be attentive to those issues only that relate to their current knowledge and experience and to information supporting strategic decisions already made (Dearborn and Simon, 1958; Feldman and March, 1981), ultimately cramping the breadth of strategic change. Related, too much board advice can trigger cognitive overload, which may restrain the TMT from effectively using its own DMCs aimed at innovating in strategic change (De Dreu, 2006). Consequently, we argue that ultimately a board's intense advice-giving under strong inter-TMT-board DMC faultlines undermines the TMT in the leverage of its DMCs, which may even cramp the breadth of strategic change because the TMT may lower its information-acquisition efforts or strategic change implementation (Levit, 2012; Aghion and Tirole, 1997).

In summary, we suggest that the relationship between intra-TMT-DMC faultline strength and strategic change breadth is conditioned by both the board's advice-giving and inter-TMT-board DMC faultline strength:

*P4a: Strong inter-TMT-board DMC faultlines lessen the positive impact of intense advice-giving on the relationship of intra-TMT DMC faultline strength with strategic change breadth.*

*P4b: Weak inter-TMT-board DMC faultlines accentuate the positive impact of intense advice-giving on the relationship of intra-TMT DMC faultline strength with strategic change breadth.*

As is the case for the impact on strategic change breadth, modest advice-giving by the board, irrespective of whether inter-TMT-board DMC faultlines are weak or strong, will be inconsequential in terms of strategic change speed. In line with our argument that under weak intra-TMT DMC faultlines TMT decision-making likely becomes faster due to common understanding, interpretations, and use of networks, reducing the time to align ideas, Lau and Murnighan (2005) found that weak faultlines, in general, come with collaboration, cause little conflict, and foster exchanging task-related information openly. As advice provided by the board may increase strategic change breadth, it may also improve strategic change speed as managerial attention to relevant issues may become reinforced. With weak inter-TMT-board faultlines, the TMT and board are likely aligned in their points of views and experiences, hence advice provided by the board may further confirm the TMT's leverage of its DMCs, improving the speed in initiating and implementing strategic change.

However, if the TMT has to "stretch" its leverage of DMCs, for example, in the form of cognitive resources and attention, in order to process intense advice provided by the board, and additional, potentially conflicting, interpretations and resources provided by the board, we suggest that this will ultimately reduce the speed of strategic change (Teece, 2007; Maghzi et al., 2015). This is because strategic change requires significant cognitive resources such as mental stamina, experience, skills, and knowledge (Boeker, 1997). The TMT is forced to take extra time and effort to process all available information, hence experiences a reduction in the speed of strategic change. When intense advice-giving by the board is divergent from the TMT's engagement in strategic change, it may cause difficulty in coordinating. This advice-giving is likely to develop further factions and coalitions (Rubino et al., 2016) between the TMT and board members when the two

bodies are characterized by strong inter-TMT-board DMC faultlines, leading to communication and organizational problems, hence reducing the speed of strategic change.

The negative effect of advice-giving on strategic change speed is however more pronounced under strong DMC faultlines between the TMT and board. While strong inter-TMT-board DMC faultlines tend to encourage the TMT in seeking advice from the board (Richard et al., 2019), it also is time-consuming to process a large amount of new information. Therefore, strong inter-TMT-board DMC faultlines will require emphasis to align behaviors between the two bodies (Richard et al., 2019) to make available, process, and evaluate appropriate information in making strategic decisions. In addition, strong DMC faultlines between the two bodies are likely to reduce communication between the two bodies due to different ‘languages’ (Gibson and Vermeulen, 2003), which further slows down knowledge and information sharing. Hence, strong inter-TMT-board DMC faultlines (Kaczmarek et al., 2012; Sahaym et al., 2016) can likely bring about barriers between the two bodies (Kaczmarek et al., 2012), which can enlarge the undesirable impact of advice-giving on the strategic decision progress.

To conclude, we propose that the relationship between intra-TMT DMC faultline strength and strategic change speed is conditioned by both the board’s advice-giving and inter-TMT-board DMC faultline strength:

*P5a: Strong inter-TMT-board DMC faultlines accentuate the negative impact of intense advice-giving on the relationship of intra-TMT DMC faultline strength with strategic change speed.*

*P5b: Weak inter-TMT-board DMC faultlines lessen the negative impact of intense advice-giving on the relationship of intra-TMT DMC faultline strength with strategic change speed.*



## **Discussion**

The focus of this paper has been to advance conceptual understanding that explains the influence of a firm's board on its TMT's capacity to produce strategic change. In doing so, we clarified how the board's monitoring and advice-giving roles act as en/disabling mechanisms for the TMT's DMCs when enacting strategic change.

### **Theoretical implications**

Despite the frequent use of the DMC concept in management literature, scholars have criticized its lack of clarity regarding its underlying mechanisms (see Barreto, 2010; Peteraf et al., 2013; Schilke et al., 2018). Importantly, not only has the role of the TMT rather than individual managers received little research attention in DMC literature, but the role of a firm's board has not been discussed in this literature either. To address these gaps, we have provided a new theorizing of the relationship between TMT DMCs and strategic change by accounting for the en/disabling effect of a firm's board's monitoring and advice-giving. Our conceptualization contributes to the existing literature in several ways.

First, we add to research on strategic leadership systems by responding to calls to investigate the external interface of the TMT with the board (Bongjin et al., 2009; Luciano et al., 2020; Whitley et al., 2020). Specifically, we chart the relationship between these two bodies in the context of DMCs. This shift of analyzing DMCs at the TMT level represents an important contribution to DMC research as we highlight that only investigating individual managers, which dominates existing DMC research (Simsek et al., 2010; Martin, 2011; Teece, 2012), is not telling the entire story. Furthermore, our theorizing adds weight to the view that firms should not be interpreted as entities with separate strategic decision-making and governance bodies, but rather attention needs to be given to the external interface between the firm's TMT and its board to better understand firm behavior (Wilden et al., 2019).

Specifically, by drawing on research conceptualizing the TMT as part of the strategic leadership system (Luciano et al., 2020), we create an understanding of how board roles condition the leverage of DMCs residing within the TMT; ultimately, affecting strategic change. Since both the board and TMT have limited cognitive resources and time (Faleye et al., 2011), and DMC faultlines vary within TMTs (Tang et al., 2011), the extent of board monitoring and advice-giving need to be managed carefully to enhance the speed and breadth of strategic change. This expands current literature of board effectiveness in performing its monitoring and advising duties (Faleye et al., 2011; Guldiken and Darendeli, 2016) by substantiating that the usefulness of monitoring and advising in strategic change depends on the TMT's DMCs. More specifically, we add precision to this discussion by distinguishing speed and breadth in strategic change.

Second, we then extend our discussion of the impact of monitoring and advice-giving by accounting for the diversity in strategic leadership systems (Cooper et al., 2014). Previous research has argued that differences in DMCs lead to different strategic decisions (Herrmann and Datta, 2005; Volonté and Gantenbein, 2016). We add precision to this research by discussing how differences, first, within the TMT's DMCs and, second, between the TMT's DMCs and the board's DMCs condition the impacts of advice-giving and monitoring on achieving strategic change speed and breadth. To do so, we integrated, and demonstrate the utility of, faultline reasoning into DMC literature. Our arguments expand current thinking (Lau and Murnighan, 2005; Na et al., 2018; Richard et al., 2019) by examining both intra-TMT and inter-TMT-board faultlines based on DMCs. By theorizing about the strength of faultlines between subgroups we engage in a deeper inquiry not only of DMC faultlines within TMTs, which Richard et al. (2019) recommends as a promising area of future TMT research, but also DMC faultlines between the TMT and board. Our detailed discussion leads to a more holistic understanding of the impact of strategic leadership team

faultlines on strategic change. We support the idea of Arnold et al. (2000) and Richard et al. (2019) that effective strategic leadership can build bridges between strategic leadership system members regardless of subgroups to minimize negative effects. We however argue that this is conditional on the extent to which boards engage in monitoring and advice-giving. Specifically, we suggest that intense monitoring may become detrimental to achieving greater breadth and speed in strategic change, which is more so the case in situation with strong inter-TMT-board DMC faultlines. Then, whereas intense advice-giving can be beneficial in improving strategic change breadth, especially when these inter-TMT-board faultlines are weak, it can be damaging in accomplishing greater speed in strategic change, especially when these faultlines are strong. Hence, consideration of diversity in terms of DMC faultlines within the TMT and between the TMT and board not only advances our understanding about DMCs in business strategy literature but also in strategic leadership and governance literature.

Our theorizing points to promising directions for further research. For example, our discussion focused on the two central board roles of monitoring and advice-giving. Related, our theoretical framework can also be expanded by integrating more explicitly the micro processes within the board, as well as between the board and the TMT, which condition the TMT's leverage of its DMCs. For instance, consideration of behavioral mechanisms are likely to further condition this leverage. Aligned with our reasoning that unpacks the external interface between the TMT and board and related faultlines, the behavioral theory of the firm has stressed similarly not only the role of coalitions within firms but also suggests that firms set targets or aspiration levels for desirable performance, and will respond to performance below these targets by searching for and becoming more willing to accept risky solutions (Cyert and March, 1963; Greve, 2003; Wilden et al., 2019). Performance below aspiration levels spurs strategic change (Kim et al., 2015), as it encourages the

exploration of sensing and seizing opportunities and threats, the exploitation of sensed opportunities, and the fending off of threats. Therefore, the question arises of how aspiration levels as an internal trigger of TMT and firm behavior condition the impact of different board roles to enable the TMT to best leverage its DMCs to effect strategic change (March and Simon, 1958; Greve, 1998). For instance, how does the board's monitoring condition the development and impact of aspiration level performance targets?

Additionally, further clarification can be provided by unpacking more deeply DMCs at the TMT-level and correspondingly at the board-level. Following Hambrick, Misangyi, & Park's (2015) quad model of effective board members, future research should investigate how the ability (independence, expertise, and bandwidth), along with motivation of the board and its individual members may affect leverage of its DMCs and ultimately through its monitoring and advice-giving affect the TMT in leveraging its DMCs.

Further, our argumentation is premised on the view that the senior leadership team plays the key role in strategic change. However, the view that the TMT and the board are solely responsible for driving strategic change has been challenged, stressing the importance of middle managers for both strategic change initiation and implementation (Heyden et al., 2017; Tarakci et al., 2018; Heyden et al., 2020). Middle managers often work in boundary-spanning roles and thus represent an important intersection between the organization and its environment, while also connecting executive and supervisory tiers within the organization (Reimer et al., 2016; Randhawa et al., 2019). Middle managers differ from senior managers in their decision-making (Kanter, 1982; Burgelman, 1994; Kuratko et al., 2005; Rouleau, 2005; Ren and Guo, 2011; Peters et al., 2019; Schubert and Tavassoli, 2020). Some research has indicated how the TMT can enable radical change initiatives by middle managers without discussing how DMCs and possible matter in this context (Heyden et

al., 2020). Thus, future research would benefit from investigating the DMCs of middle managers, their interaction with the TMT and its DMCs, as well as the relationship with strategic change breadth and speed. In line, while we advocate further unpacking the supplementary role of middle managers' DMCs in producing strategic change and have started in the present paper clarifying the accompanying role of the board's DMCs, extant research cannot yet explain how external experts and consultancies, with their embedded DMCs, complement the TMT in affecting strategic change. Hence, we recommend studying the important role of external advisors in complementing the TMT in their leverage of DMCs.

We further advocate for empirical research to not only test the here proposed arguments, but also any of the suggested extensions. For example, using longitudinal panel data, future research may investigate aspirational level performance as a trigger to understand how board involvement in strategic decision making affects strategic change. This may yield empirical insights into the effect of the monitoring and advice-giving roles of boards and how these affect the TMT's leverage of its DMCs when their firm's performance falls below its aspirational level; this information may help us understand whether a board should provide more or less advice to its TMT, and whether tighter or looser monitoring is more appropriate in such situations. Complementary empirical research could focus on in-depth, longitudinal case analyses that investigate specific TMT decision episodes (e.g., entering a new market) and how the board's provision of additional advice and/or monitoring impacts TMT's leverage of its DMCs.

### **Managerial implications**

We also raise several interesting managerial implications. Our discussion highlights the importance of boards to carefully manage monitoring and advice-giving, as either serves as a double-edged sword and may become 'too much of a good thing'. Specifically, we suggest that boards first need

to understand the degree of diversity within the TMT as well as the differences in DMCs between itself and the TMT. TMTs can leverage their DMCs to drive strategic change in their firms. However, DMC faultlines within the TMT can dampen the strategic change that a TMT endeavors to produce. Whereas boards can engage in monitoring and advice-giving, they must be cognizant of the extent to which they do so. Because intense monitoring further stifles both the breadth and speed of strategic change that can be accomplished, and that this is more pronounced when DMC faultlines between the bodies are strong. Boards should refrain from intensive monitoring especially when there are strong faultlines between the board and TMT. Furthermore, when determining whether to engage in intensive advice-giving, boards ought to consider the impact on breadth versus speed in strategic change. Intensive advice-giving can be beneficial in improving the breadth of strategic change, especially when faultlines between the board and TMT are weak but not so when they are strong. Contrary, this intensive monitoring however can be detrimental and engender a further dampening of strategic change speed which is more pronounced when these faultlines are strong and less when they are weak.

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