

STRATEGIC LEADERSHIP SYSTEMS: VIEWING TOP MANAGEMENT TEAMS AND BOARDS OF DIRECTORS FROM A MULTITEAM SYSTEMS PERSPECTIVE

MARGARET M. LUCIANO
JENNIFER D. NAHRGANG
CHRISTINE SHROPSHIRE
Arizona State University

Top management teams (TMTs) and boards of directors (boards) face increasingly turbulent environments as they strategically lead firms toward superior firm performance. The dominant theoretical lens about these two groups is agency theory, which focuses on the need for independence. We suggest that the environment in which the TMT and board govern is broader than conceptualized by agency theory, and thus theories regarding strategic leadership also require expansion. Drawing from the multiteam systems literature and broader systems theory, we offer a new consideration of the TMT and board as part of a strategic-oriented multiteam system, which we refer to as a *strategic leadership system*. The core premise of our theorizing is that TMTs and boards that strongly emphasize attention to both working independently and interdependently enhance their group and shared task performance, and in turn, firm performance. We further nuance this theorizing by describing how external environmental characteristics (i.e., munificence, complexity, dynamism) strengthen or weaken the influence of attention to working independently or interdependently, thereby shifting the zones of system effectiveness. Based on this theorizing, we offer a 2 × 2 framework combined with practical recommendations for strategic leaders. Additional implications, limitations, and directions for future research are discussed.

The top management team (TMT) and the board of directors (board) reside at the apex of the firm's structure and provide strategic leadership for the firm. These groups are increasingly challenged with leading their firms in turbulent times. This turbulence can be seen in the topple rate of organizations, defined as the likelihood an organization loses its position as an industry leader, which has more than doubled over the past 40 years (Buescher & Viguerie, 2014). The average lifespan of a firm on the S&P 500 has likewise declined significantly (i.e., 10–15 years [Mochari, 2016]). This increased turbulence challenges a firm's ability to sustain superior firm performance (Kraatz & Zajac, 2001; Siggelkow & Rivkin, 2005)

and highlights the importance of strategic leadership (Finkelstein, Hambrick, & Cannella, 2009).

To date, the dominant theoretical lens about the groups governing the firm is agency theory (Daily, Dalton, & Rajagopalan, 2003; Jensen & Meckling, 1976), which focuses on the need for independence between the board and TMT and the intractability of conflicting interests (Dalton, Hitt, Certo, & Dalton, 2007). However, a focus on independence and conflicts of interest (Dalton et al., 2007) is likely insufficient to respond in increasingly turbulent environments. Indeed, agency theory might have limited applicability beyond highly capitalized, established firms (e.g., S&P 500 [Walters, Kroll, & Wright, 2010]) operating in stable environments, given the potential for self-interested managerial actions misaligned with owner interests. Furthermore, since the introduction of agency theory, expectations and responsibilities for boards and TMTs have also expanded (Daniels, 2013). Given that the context in which the TMT and board govern is broader and more turbulent than has been conceptualized by agency theory, we suggest that theories regarding strategic leadership need to expand as well.

The authors wish to thank Amy Hillman, Bert Cannella, Jon Bundy, John Mathieu, Rob Ployhart, and three anonymous reviewers for their insightful comments throughout the paper development process. We also wish to thank Lawrence Arrey for his graphic design support, as well as participants at the 2016 Strategic Management Society Annual Conference and the 2016 Interdisciplinary Network for Groups Research Conference for their insights.

Accordingly, we reach beyond existing theories of strategic leadership and build new theory that is better suited for today's realities. Drawing from systems theory (Katz & Kahn, 1978; Mathieu, Marks, & Zaccaro, 2001), we offer a new perspective on the TMT-board relationship as one in which the TMT and board comprise a strategic-oriented multiteam system, which we refer to as a *strategic leadership system*. In doing so, we suggest that TMTs and boards share a superordinate goal of superior firm performance, and that they should orchestrate their work processes to emphasize attention to both working independently and working interdependently. The systems approach we articulate honors the respective group functions and need for independence, while simultaneously promoting their interdependence. This is well suited to enable responsiveness to shifting environmental demands (Mathieu et al., 2001; Zaccaro, Marks, & DeChurch, 2012), as TMTs and boards are better positioned to coordinate their actions and understanding to support both group and shared tasks.

Our theory of strategic leadership system functioning adopts a multidisciplinary approach, drawing from and contributing to macro- and micro-oriented management literatures. We explain how and why the combination of attention to working independently and interdependently enhances system effectiveness, illuminating the interplay across levels. By articulating cross-level processes at the strategic apex of organizations, our work contributes greater theoretical depth to the multiteam systems (MTSs) literature, which has largely focused on within-level linear effects. This also contributes to the corporate governance literature by expanding beyond agency theory's emphasis on independence, to illustrate the value of those insights while moving the domain forward to incorporate the importance of working interdependently.

Our theorizing also contributes insights on how the environment influences system functioning. The starting premise of our paper is that attention to working independently and to working interdependently are both needed to facilitate system effectiveness in turbulent environments. However, rather than limiting our theorizing to turbulent environments and assuming homogenous effects, we build theory on how facets of environmental turbulence (i.e., complexity, munificence, and dynamism) strengthen or weaken the influence of attention to working independently or interdependently on system effectiveness. This contributes theoretical precision to both the corporate governance and MTS literatures, which have acknowledged the importance of the environment but have yet to articulate how it influences system functioning or how environmental characteristics may have varying effects. This contribution is

particularly important for the MTS literature, as the system view has been embraced as ideal for operating in complex and dynamic environments without fully theorizing why (Zaccaro et al., 2012).

Finally, to increase the applicability of our theorizing and to demonstrate how it can change practice, we translate our theory into a 2×2 framework to provide a diagnostic tool for strategic leaders to assess their current approach to managing the dual tension. We then discuss how placement in the 2×2 relative to the competitive environment informs their potential system effectiveness, thereby illustrating how environmental characteristics shift the zones of effectiveness. This creates the foundation necessary to identify the types of interventions likely to be effective for strategic leadership systems with different starting points and in different operating environments. Finally, to assist in resolving potential discrepancies between the current and desired system state, we offer specific practices that strategic leadership systems can consider implementing to encourage attention to working independently and interdependently.

TOWARD A CONCEPTUALIZATION OF STRATEGIC LEADERSHIP SYSTEMS

At the intersection of corporate governance and upper echelons logic, strategic leadership refers to the study of the organizational actors at the apex of the firm, and the effects of these on organizational outcomes (Finkelstein et al., 2009). Finkelstein and colleagues (2009: 5) chose the term strategic leadership because "it connotes management of an overall enterprise, not just a small unit; it also implies substantive decision-making responsibilities, beyond the interpersonal and relational aspects usually associated with leadership." Echoing Hambrick's (2007: 334) axiom that "leadership of a complex organization is a shared activity," we suggest that as organizational complexity and environmental turbulence continue to increase, effectively sharing organizational leadership is more important than ever.

Strategic leadership of corporations is beyond the managing capacity of a single group, thus requiring the coordinated efforts of multiple groups at the apex of the organization that have distinct and shared tasks. Drawing from the MTS literature and broader systems theory, we offer a new way of considering the TMT and board as part of a strategic-oriented multiteam system, which we refer to as a *strategic leadership system*. We offer theory as to how and why attention to working independently and interdependently enhances the proximal and distal outcomes that comprise system effectiveness, and how environmental characteristics

alter those relationships. An overview of our theoretical model is presented in Figure 1.

The MTS literature has provided insights for reconceptualizing the dynamics between TMTs and boards in the modern, turbulent environment, as it explicitly incorporates the dynamics within and between groups in complex and dynamic environments (Zaccaro et al., 2012). Indeed, the MTS literature was born out of the need to understand constellations of interdependent collectives that did not fit existing forms (e.g., large teams, team-based organizations, matrix organizations) yet were well-suited for operating in dynamic and complex environments (Mathieu et al., 2001; Zaccaro et al., 2012). The traditional definition of an MTS is:

Two or more teams that interface directly and interdependently in response to environmental contingencies toward the accomplishment of collective goals. MTS boundaries are defined by virtue of the fact that all teams within the system, while pursuing different proximal goals, share at least one common distal goal; and in doing so exhibit input, process, and outcome interdependence with at least one other team in the system. (Mathieu et al., 2001: 290)

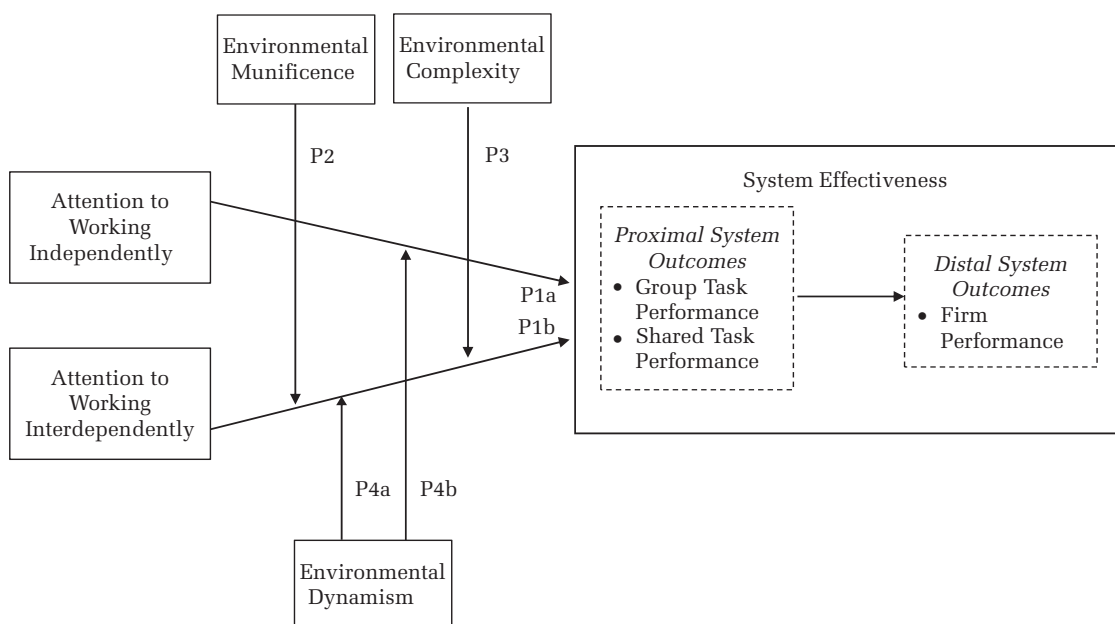
This definition highlights two core factors of MTSs: interdependence between teams, and a goal hierarchy

with proximal and distal elements. Acknowledging the proximal and distal elements is important as it establishes the criterion space for system effectiveness: “Effectiveness of the MTS, then, is defined not only in terms of how well each team accomplishes its proximal goals, but more importantly on how well they collectively accomplish shared goals at the higher levels of the goal hierarchy” (Mathieu et al., 2001: 291). Several conceptual papers have further discussed system effectiveness (Mathieu, Luciano, & DeChurch, 2018; Mathieu et al., 2001). In addition, numerous empirical studies have linked MTS functioning with system effectiveness (e.g., Davison, Hollenbeck, Barnes, Slesman, & Ilgen, 2012; De Vries, Hollenbeck, Davison, Walter, & Van der Vegt, 2016; Firth, Hollenbeck, Miles, Ilgen, & Barnes, 2015), with several demonstrating the importance of leadership (e.g., DeChurch, Burke, Shuffler, Lyons, Doty, & Salas, 2011; DeChurch & Marks, 2006; Lanaj, Foulk, & Hollenbeck, 2018; Lanaj, Hollenbeck, Ilgen, Barnes, & Harmon, 2013). However, this research has largely focused on action-oriented MTSs rather than strategic-oriented MTSs.

Key Assumptions and Boundary Conditions

In developing our theory of strategic leadership system functioning, we note several assumptions

FIGURE 1
Overview of Strategic Leadership System Functioning



Note: P = Proposition.

and key boundary conditions. First, this is a strategic-oriented system, rather than an action-oriented system. The existing MTS literature has typically studied systems performing specific discrete tasks, where achievement of the superordinate goal is clearly within their purview (Mathieu et al., 2018); conversely, in strategic leadership systems the superordinate goal of superior firm performance is a much more distal outcome. There are numerous factors that may alter the relationship between the proximal outcomes of group and shared task performance and the distal outcome of firm performance (e.g., middle managers [Raes, Heijltjes, Glunk, & Roe, 2011], industry, or geography [Bamiatzi, Bozos, Cavusgil, & Hult, 2016; Rumelt, 1991]). Although the TMT and board have a large influence on firm performance (Finkelstein et al., 2009), we acknowledge the temporal and conceptual distinction between proximal and distal outcomes. In addition, we note that the precise contents of system effectiveness presented in this paper may be less germane in other types of systems, but argue that the underlying relationships still apply. Second, although we draw from MTS theory, we do not assume that TMTs and boards fit the classic definition of teams.¹ We readily acknowledge varying levels of within-group interdependence, or “teaminess,” among TMTs and boards. However, their degree of within-group interdependence neither precludes nor determines the degree of interdependence between the groups, the key feature compelling system-level theorizing (Mathieu et al., 2018). We suggest, however, that the extent to which any particular TMT or board exhibits sufficient within-group interdependence to be classified as a team, as opposed to a group, only strengthens the proposed relationships (cf. LePine, Piccolo,

Jackson, Mathieu, & Saul, 2008). Third, with regard to the composition of our strategic leadership system, we focus our theorizing on two groups: TMTs and boards. In doing so, our theorizing emphasizes the two most critical groups for organizational outcomes (Finkelstein et al., 2009) and lays the groundwork for how groups at the apex of the firm can orchestrate their work processes more effectively. We also assume that board and TMT members have the requisite knowledge, skills, and abilities to fulfill their individual primary roles, and do not theorize how changes in membership or power dynamics influence the system. We revisit these assumptions and boundary conditions in the “Discussion” section. In the following section, we begin building our theory of strategic leadership system functioning by briefly describing the proximal (group task performance, shared task performance) and distal (firm performance) outcomes that comprise system effectiveness (see Figure 1).

Group Tasks

The fulfillment of group functions (i.e., tasks completed by the board or TMT only) comprises *group task performance* and is well-established in the strategy and governance literatures (Dalton et al., 2007). The TMT manages internal operations on an ongoing basis: analyzing, formulating, and implementing strategies, policies, and tactics. Alternatively, the board monitors and advises TMT decisions and fulfills a fiduciary responsibility in approving major decisions and certifying financial results (Boivie, Bednar, Aguilera, & Andrus, 2016). The board is broadly responsible for overseeing CEO employment (e.g., compensation, succession planning), connecting the firm with external resource networks to alleviate resource dependencies, and ensuring that the general strategic direction protects the investment of capital providers, such as shareholders and creditors (Hillman & Dalziel, 2003). Boards are also responsible for managing reward systems that incentivize the TMT to fulfill its distinct tasks in alignment with shareholder desires to maximize return on their investment. Both TMT and board functions are critically important for firm performance. As corporations grow in scope and complexity, performance benefits accrue from the fulfillment of TMT functions (e.g., Carpenter, 2002; Pitcher & Smith, 2001). Simultaneously, regulatory changes and demanding shareholders increase the need for boards to fulfill their functions not only for firm performance but also for firm survival

¹ We acknowledge the distinction between groups and teams in much organizational research. Authors of seminal works on strategic leadership and upper echelons theory have simultaneously referred to groups of executives and of corporate directors as teams and acknowledged the validity of challenges to the accuracy of the label (Hambrick, 1994; 2007). Notably, Finkelstein et al. (2009: 370) suggested that “the distinction between ‘team’ and ‘group’ is perhaps more subtle in the organizational behavior or organization theory literature than in the upper echelons literature.” We acknowledge the potential for TMTs and boards in practice to operate more or less like “real teams” (Barrick, Bradley, Kristof-Brown, & Colbert, 2007), and reaffirm that while this distinction is sometimes important, this variance does not substantively alter the theorizing presented in this article (Mathieu, Hollenbeck, van Knippenberg, & Ilgen, 2017).

(e.g., Dowell, Shackell, & Stuart, 2011; Lynall, Golden, & Hillman, 2003).

Shared Tasks

Perhaps as an indirect effect of agency theory's emphasis on independence between the board and TMT, in comparison to group tasks, less attention has been paid to the shared tasks of the TMT and board. Accordingly, we draw from the corporate governance, upper echelons, and MTSs literatures to identify the tasks shared by the board and the TMT. As boards and TMTs are strategy-oriented, information-processing groups who manage multiple interests, their shared tasks involve strategic visioning, aligning goals, and processing information. These shared tasks enable them to collectively pursue their superordinate goal and provide a more proximal linkage between board and TMT behaviors and firm performance.

Strategic visioning. Strategic visioning involves a range of activities that often begin with the articulation and maintenance of a strategic vision. As a shared task, strategic visioning considers the internal and external context of the business to inform transformational initiatives in light of what is working and should be retained. Strategic visioning stimulates reflexivity—defining purpose and objectives in consideration of the firm's past, present, and desired future states (Gavetti & Rivkin, 2007). A firm's strategic vision captures its current state and envisioned future simultaneously (Collins & Porras, 1996), providing a shared frame to translate purpose into action, to protect firm viability, and to strengthen performance. The strategic vision has also been described as a map directing resource investment and deployment toward the firm's overall purpose and objectives (Weick, 1979; Westley & Mintzberg, 1989), which enables superior performance (Lado & Wilson, 1994). Strategic visioning is both stable and adaptive, capturing a snapshot of current strategies and performance as well as establishing a trajectory for desired future growth (Finkelstein, Harvey, & Lawton, 2008). Whereas distinct group tasks include monitoring and managing strategy formulation and execution, visioning enables the TMT and board to jointly utilize relevant resources (e.g., Oehmichen, Schropp, & Wolff, 2017) and to navigate the tensions of strategic management, such as exploiting existing competencies and exploring new opportunities, which are critical to sustaining firm performance (Lavie, Stettner, & Tushman, 2010; Smith & Tushman, 2005).

Aligning goals. The shared task of aligning goals can be conceptualized as the level of goal priority

congruence and the compatibility of subgoals with the superordinate goal (Luciano, DeChurch, & Mathieu, 2018). Subgoals include a multiplicity of objectives chosen by the TMT or board, often without full knowledge by the other group and with potential incongruence with one another. We suggest that the TMT and board share the task of aligning goals in order to offset potential goal discordancy in the system. Substantiating the importance of aligning goals, prior research has shown that congruence in goal importance within the TMT relates positively to firm performance (Colbert, Kristof-Brown, Bradley, & Barrick, 2008), whereas incompatible subgoals and incentive systems may result in excessive risk taking (Sanders & Hambrick, 2007), risk aversion (Beatty & Zajac, 1994; Jensen & Meckling, 1976), or failures in succession planning (Wiersema, 2002; Zhang & Rajagopalan, 2004). The shared task of aligning goals also helps address foundational issues of corporate governance, namely the agency problem relating to the potential for diverging interests between principals (owners) and agents (TMTs).

Processing information. The shared task of processing information involves iteratively gathering, interpreting, and selecting information (Hinsz, Tindale, & Vollrath, 1997). Effective information processing can be conceptualized as the degree to which information is taken in, interpreted, and used to make strategic decisions (e.g., Boivie et al., 2016; Hinsz et al., 1997; Mintzberg, Raisinghani, & Théorêt, 1976). In upper echelons research, scholars have noted that strategy making should extend beyond one person to include input from TMT (Hambrick & Crossland, 2018) and board members (Westphal, 1999) to offset the processing demands of these novel and complex decisions (Mintzberg et al., 1976). Thus, sharing the task of processing information may reduce barriers to information (Boivie et al., 2016) and avoid suboptimal strategic decisions (Geiler & Renneboog, 2016; Park, Westphal, & Stern, 2011). Qualitative research has also suggested that effective boards engage in constructive dialogue and address decisions comprehensively (Finkelstein & Mooney, 2003); we suggest this advice is applicable to processing information not only within the board but also as a shared task with the TMT (Morais, Kakabadse, & Kakabadse, 2018).

Superordinate Goal of Superior Firm Performance

At the apex of the goal hierarchy, the superordinate goal of a system is a shared, common, distal goal, reflecting the purpose for forming the system (Mathieu, 2012; Mathieu et al., 2001). Broadly speaking, the

superordinate goal of a strategic leadership system is superior firm performance, which suggests that, despite disparate functions, the TMT and board are jointly responsible for the pursuit of this higher-level, shared objective. Although numerous metrics of firm performance have been advanced (e.g., accounting-based, market returns, social performance indicators), strategy research has no consensus definition or measure of firm performance (Richard, Devinney, Yip, & Johnson, 2009). Similarly, the MTS literature has not provided a specific metric of system performance; rather, performance measurement is tied to the extent to which system-specific goals are accomplished (Marks, DeChurch, Mathieu, Panzer, & Alonso, 2005; Mathieu, et al., 2018). Consistent with perspectives from the MTS and strategy literatures, as well as our holistic approach to strategic leadership systems, we conceptualize firm performance broadly to acknowledge the interests of multiple stakeholders influenced by the firm's actions. The broad conceptualization encompasses the varied and potentially evolving definitions of what firm performance means for a specific firm at a specific point in time (Quinn & Cameron, 1983).

In order to achieve the superordinate goal of superior firm performance, strategic leadership systems must fulfill their distinct group tasks, including board-specific tasks (e.g., monitoring, advising) and TMT-specific tasks (e.g., strategy formulation, managing daily operations), and shared tasks (e.g., strategic visioning, aligning goals, processing information). By conceptualizing the relationship between TMTs and boards from an MTS perspective we acknowledge the task-related interdependencies between them and how they influence one another. This approach overcomes the myopic focus on one part of their job (i.e., unique group tasks), which has been propagated by the majority of the corporate governance literature examining these groups separately. If the teams were independent this would not be problem, as other teams are just context. However, because of their interdependencies, we need to understand how they work together.

STRATEGIC LEADERSHIP SYSTEM FUNCTIONING

Building on our expanded and contextualized understanding of system effectiveness, we offer theory on strategic leadership system functioning that explains how and why the TMT and board orchestrating

their processes to emphasize both attention to working independently and attention to working interdependently enhances system effectiveness. Naturally, we acknowledge the importance of within-level linear effects supported by the corporate governance and MTS literatures: attention to working independently enhances group task performance and attention to working interdependently enhances shared task performance (Marks et al., 2005). However, focusing exclusively on within-level linear effects leads to oversimplification of strategic leadership system functioning (i.e., the reason boards and TMTs should attend to working independently and interdependently is because the former is needed to support group task performance and the latter to support shared task performance) and erroneous assumptions and recommendations (i.e., the only time the board and TMT need to interact is on shared tasks and those interactions offer no benefits to their distinct group tasks). By conceptualizing the interplay between boards and TMTs, we gain new insights into how the two work processes enable the strategic leadership system to capture and integrate a multiplicity of perspectives as well as execute both group and shared tasks. More than the sum, we suggest a synergistic relationship: having more diverse perspectives provides a greater pool from which to select, and a shared understanding enables more effective integration and clarity for the execution of both group and shared tasks.

Attention to Working Independently and Interdependently

As part of a strategic leadership system, TMTs and boards must orchestrate their work processes through the two major modes in collectives: working independently and working interdependently. Consistent with the corporate governance view of independence, we discuss working independently as separation between groups (i.e., TMT and board members, respectively, work separately from the other group). Conversely, working interdependently involves between group interactions (i.e., TMT and board members engage with one another). Core to our theorizing, as shown in Figure 1, is that TMTs and boards that orchestrate their work processes to emphasize attention to working independently and interdependently enhance group and shared task performance and, in turn, firm performance. We incorporate insights from decades of corporate governance research, embracing agency theory's rationale for the importance of the board and TMT working

independently while adding critical recognition of the value of working interdependently. Whereas certain group tasks (e.g., corporate audit) mandate working independently, simply aligning tasks with separate work processes fails to capture the potential synergies necessary to achieve the superordinate system goal of superior firm performance.

We suggest that these synergies occur via enhanced coordination. Building on conceptualizations of coordination processes from the teams (Marks, Mathieu, & Zaccaro, 2001; McGrath, Arrow, & Berdahl, 1999) and MTS (Firth et al., 2015; Murase, Carter, DeChurch, & Marks, 2014) literatures, below we feature coordination of understanding, which includes the capture and integration of information via lowering barriers to exchange and more accurate interpretation; and coordination of action, which includes execution via specialized focus and implementation, along with adaptation via tactical choices and strategic evolution. Although there are subtle distinctions in how the mechanisms manifest across the group and shared tasks (e.g., for group tasks, adaptation reflects ongoing tactical choices, whereas for shared tasks, adaptation is more about holistic evolution of strategy), we use the same terminology for the overarching constructs to promote a unified theoretical framework.

Group task performance. Whereas attention to working independently and interdependently are often considered separately, they have complementary effects on distinct group tasks based on their joint consideration. Overall, the combination of working independently and interdependently enables boards and TMTs to focus on their specific task functions enriched by intergroup exchange. These work processes in tandem support well-functioning groups and explain why realized strategy often diverges from its original, even codified, form (e.g., Mintzberg & Waters, 1985).

Starting with the board's task performance, some board responsibilities most central to corporate governance (i.e., audit, compensation) must be completed and certified by independent outside directors. Many companies have instituted board executive sessions (meetings including only independent outsiders) and a lead independent director to encourage frank discussion free from the view of any TMT members. These independent activities highlight the board's distinct tasks to provide oversight, reinforce its role to represent shareholder interests, and furnish separate opportunities to voice concerns and expertise. Heightened focus on board tasks of monitoring and advising improves their execution of these tasks

and reflects coordination of action. For example, institutional routines such as resource allocation approval enable the board to work independently to guide strategic direction over time (Parker, 2007). However, working interdependently also helps overcome certain barriers to board performance, via the TMT's provision of deep, internal knowledge that helps the board identify potential risk exposure, funding needs, and the applicability of their collective experiences (McDonald, Westphal, & Graebner, 2008). Stated differently, capturing and integrating the TMT's internal knowledge enables the board to more effectively understand the particular realities faced by the firm. In addition, by working interdependently, the board better functions as independent oversight (e.g., the lead director helps shape the board's agenda [Krause, Withers, & Semadeni, 2017]). Understanding the TMT's strategic imperatives helps the board manage its own tasks, such as structuring and composing the committees where much board work is accomplished. For example, by appreciating the TMT's long-term plans, the nominating or governance committee can think more holistically about board and TMT capital relative to the firm's changing strategic needs. Boards and TMTs can shift between challenging and supporting one another's task independence, and thus develop trust and verification conditions necessary for accountability (Nicholson, Pugliese, & Pieter-Jan, 2017).

Looking downstream, working interdependently assists in aligning the board's group tasks with shared tasks (e.g., succession planning in concert with strategic visioning; incentive design in concert with aligning goals), which improves firm performance. In sum, attention to working independently and interdependently improves board task performance through coordination of understanding (e.g., heightened capture from separate opportunities to voice perspectives, integration of TMT and board knowledge) and of action (e.g., execution and adaptation of distinct board tasks with shareholder interests and organizational realities in mind).

Turning to the TMT's task performance, whereas the TMT primarily works independently of the board, given their full-time employment and management of day-to-day operations, working interdependently with the board also benefits the fulfillment of their distinct group tasks. As vocal shareholders increasingly demand significant time from executives (Langley, 2015), working interdependently helps both groups function more efficiently as the TMT can focus on a subset of firm stakeholders (e.g., managing

value-chain relationships and critical partnerships), while the board interfaces with activists and institutional owners. For example, the TMT's awareness of how the board is handling interference from powerful shareholders can inform the TMT's negotiations with other important stakeholders, such as suppliers or employees. The TMT then operates more effectively by focusing on its specialized tasks (execute) and implementing tactics to increase responsiveness to opportunities and threats (adapt). In addition, working interdependently allows the TMT to manage uncertainty by gaining insight into the board's strengths and expertise, not only toward the generation of ideas and opportunities but also to manage or identify risks. When the board shares its experiences with various strategies and contexts, the TMT may identify new tactics or better gauge the efficacy of current ones (Sundaramurthy, Pukthuanthong, & Kor, 2014). Through network connections, the board may help identify executive candidates to increase diversity or provide a needed skillset within the TMT. Further, an understanding of the TMT's strategic imperatives and functional needs can inform the independent compensation committee's decisions around CEO compensation in place of heavy reliance on outside compensation consultants.

Looking downstream, working interdependently assists in aligning TMT group tasks with shared tasks (e.g., strategy formulation in concert with strategic visioning; managing daily operations in concert with aligning goals), which improves firm performance. In sum, attention to working independently and interdependently improves TMT task performance through coordination of understanding (e.g., heightened exchange allows greater utility of the board as a resource) and of action (e.g., supporting the specialized execution of TMT tasks and selection of new functional tactics).

Interdependencies between the TMT's internal knowledge and the board's boundary-spanning orientation can help both groups be more effective in their respective tasks. Attention to working independently and interdependently offers benefits to board and TMT task performance. These advantages extend beyond effectively working independently and the natural links between the tasks (e.g., the better the board performs its tasks of advising, the better the TMT's inputs for strategy formulation and implementation, which in turn eases the challenges associated with advising and monitoring). As outlined, attention to working independently and interdependently helps each group coordinate understanding and action to overcome barriers to exchange and

improve operational efficiency, thereby enhancing group performance.

Proposition 1a. Attention to working independently and interdependently facilitates coordination of understanding and action, and thereby enhances TMT and board group task performance.

Shared task performance. Similar to group tasks, across the shared tasks of strategic visioning, aligning goals, and processing information, coordination of understanding (e.g., capture and integration) and coordination of action (e.g., execution and adaptation) underscore how the combination of attention to working independently and interdependently influences shared task performance. The combination of a strong emphasis on attention to both working independently and interdependently enables *strategic visioning* by capturing a diversity of perspectives from the board and TMT and also enabling the system to coalesce those inputs into a unifying shared frame, noticing and responding to more stimuli and increasing adaptability (Nadkarni & Narayanan, 2007). Given the more internal orientation of the TMT relative to the board's external orientation, integration of multiple perspectives helps coordinate understanding in the choice of strategic change versus persistence, which is difficult to assess *ex ante* (e.g., Pathak, Hoskisson, & Johnson, 2014). Orchestrating both work process modes also improves the board's ability to do its ultimate job (i.e., hiring and firing the CEO), in part by identifying heirs apparent among the TMT along with concerns about strategic vision consistency in potential successors (Bigley & Wiersema, 2002; Zhang & Rajagopalan, 2004). Ongoing strategic management also presents inherent tensions in the coordination of action, such as competing demands toward exploitation and exploration (Levinthal & March, 1993; Smith & Tushman, 2005) or conformity and differentiation (cf. strategic balance paradox [Deephouse, 1999; Zuckerman, 2016]). The reflexivity of strategic visioning helps to integrate diverse perspectives into a shared frame and to overcome competing pressures toward legitimacy and differentiation, which is key to pursuing competitive advantage and the system superordinate goal (Zhao, Fisher, Lounsbury, & Miller, 2017).

Attention to working independently and interdependently also facilitates the shared task of *aligning goals*. The strategic leadership system benefits from reinforcement of distinct group roles, but also calls for recognition of the mutual dependence between the two groups as they work together to fulfill their shared tasks and the superordinate goal of superior

firm performance (Luciano et al., 2018). The combination both creates and enables closure of representational gaps that result from the TMT and board being unaware of competing priorities of the other group and how these goals combine to affect the superordinate goal (Cronin & Weingart, 2007; Pearsall & Venkataramani, 2015). For example, the board's efforts to appease powerful shareholders may conflict with the TMT's emergent plans to diversify or refocus strategically, yet reframing these differences within a broader goal of firm survival or competitive advantage can help coordinate understanding. Although there are no known studies on aligning goals in MTSs, research has demonstrated that teams that share and seek out information related to goals, coupled with strong identification, have higher performance due to an accurate understanding of the nature, overlap, and sources of conflict in priorities (Pearsall & Venkataramani, 2015), which enables aligning goals. Addressing representational gaps, then, respects the multiplicity of board and TMT objectives while enabling them to also coordinate their actions toward greater consistency in how those objectives ultimately serve their shared interests. For example, recognizing potential conflict among subgoals (capture) and addressing their mutual dependence (integration) contributes toward aligning goals and supports the execution and evolution of incentive systems (e.g., by tightening pay-for-performance linkages).

Finally, regarding the shared task of processing information, attention to working independently and interdependently enables the system to capitalize on a diversity of experiences and ideas, detect errors, and effectively search for information. This reduces barriers to exchange across the two groups and helps each iterate between scanning processes (capture and integrate internal or external orientations) and the application of relevant expertise (execution). More specifically, working interdependently with the TMT helps the board to enrich its scanning capacity and contribute its unique problem-solving expertise (McDonald et al., 2008; Rindova, 1999) toward coordination of understanding. In particular, not only does working interdependently help to build psychological safety (Edmondson, 1999) and offset the conflict that may result from dissenting opinions, it also reduces information asymmetry (Boivie et al., 2016) by making the distributed expertise and experiences more useful to the strategic leadership system. This is conceptually similar to a transactive memory system, which is an accurate mental map of who knows what in a system (Austin, 2003;

Lewis, 2003; Ren & Argote, 2011). Formalizing a transactive memory system will likely assist the TMT and board toward coordination of action by efficiently seeking out the system member(s) with the most knowledge relevant to the strategic issue at hand and ensuring that updates are provided.

Overall, the board and the TMT's attention to working independently and interdependently facilitates the application of integrated information distilled from a diversity of perspectives. Attention to these work processes influences each shared task through slightly varied forms of capture, integration, execution, and adaptation, to yield coordination of understanding and action and, in turn, enhance shared task performance.

Proposition 1b. Attention to working independently and interdependently facilitates coordination of understanding and action, and thereby enhances shared task performance.

THE ROLE OF ENVIRONMENTAL TURBULENCE

Building on an expanded understanding that the TMT and board orchestrating their processes to emphasize attention to working both independently and interdependently enhances system effectiveness, we consider how the environment may alter those relationships. Consistent with MTS theory (Mathieu et al., 2001), an open systems view recognizes that corporations are influenced by their environments (Lawrence & Lorsch, 1967; Quinn & Cameron, 1983), and that with better alignment between the internal structure and external context, systems will be more effective (Scott, 2003). Increasing environmental turbulence is a key factor supporting the need for new theory on the dynamics of TMTs and boards in modern organizations, and recent research has suggested that it is a key moderator of the relationship between the CEO–TMT interface and firm outcomes (e.g., Bromiley & Rau, 2016). Turbulent environments are characterized by uncertainty and change (Keats & Hitt, 1988), compared to more stable and predictable external environments. In highly turbulent environments, or those that are low in opportunity, rapidly changing, or highly ambiguous, the pressure to attend to working independently and interdependently may shift. For example, the ability to capture broad perspectives and efficiently integrate information becomes increasingly critical under highly turbulent conditions (Judge & Miller, 1991). Within organizations facing turbulent environments, better-performing TMTs have more comprehensive

and quicker response times, suggesting an increased need for cohesion and agreement (Eisenhardt, 1989). In addition, MTSs are suggested to be particularly well-suited for dealing with complexity and high-demand environments, as component groups can jointly work toward distinct and shared tasks (De Vries, Hollenbeck, Davison, Walter, & Van der Vegt, 2016).

Although scholars have conceptualized a variety of potential external characteristics, we focus on recognized facets of environmental turbulence. Specifically, munificence, dynamism, and complexity have been explored separately and in concert to analyze the overall business environment, top management strategic processes, and firm performance (e.g., Baum & Wally, 2003; Boyd, 1995; Cooper, Patel, & Thatcher, 2014; Dess & Beard, 1984). Munificence represents the abundance of environmental resources that are broadly available and the estimated capacity for industry growth, while dynamism captures variability and ambiguity in industry growth opportunities. Complexity reflects instability in industry leadership based on firm market share, to capture the relative movement toward or away from concentration or dominance by industry leaders (e.g., monopoly power) over time. Whereas environmental turbulence overall intensifies challenges to system functioning, we suggest that its dimensions have varying effects on the two competing work processes. We explore each of the dimensions and discuss how environmental characteristics influence the effect of attention to working independently or interdependently on system effectiveness.

Munificence

Munificence, or market growth, refers to the level of resource abundance in a firm's external environment (Dess & Beard, 1984). Munificent environments are characterized by abundant growth opportunities and fewer external threats in the industry (Bloom & Michel, 2002). In turn, this increases the "degrees of freedom" available to organizational leaders (Hambrick & Abrahamson, 1995), allowing for greater strategic choice and magnifying the "executive effect" (Li & Tang, 2010). For example, prior research has shown that, in conditions of high munificence, TMT latitude in strategic choice contributes to firm performance (e.g., Goll & Rasheed, 2004). In short, munificent environments are resource-rich contexts that provide greater latitude for TMTs to weigh strategies and tactics, as well as room for error and the potential to pursue multiple options.

High levels of munificence constitute a low job demands context (Hambrick, Finkelstein, & Mooney, 2005), while a lack of munificence can cue "zero-sum construals of success" that decrease helping behaviors in the workplace (Sirola & Pitesa, 2017). Having an abundance of opportunities lessens the stakes of any particular decision, relaxing the demands of working interdependently around information exchange or goal alignment, and allowing each group to focus on its independent tasks. Firms in munificent environments are well-poised to take advantage of market conditions that offer numerous paths in support of the superordinate system goal, with less careful attention required toward working interdependently. We argue that munificent environments increase degrees of freedom for the TMT's pursuit of its proximal goals and relax system demands on integration in information processing, allowing more rapid exploitation of emerging opportunities. Research has also found that munificence enables more specialized contributions from TMT members (Cooper et al., 2014; Gaertner & Dovidio, 2000). Similarly, we suggest that high-growth contexts shift the board's focus toward its monitoring responsibilities, as resource acquisition demands are eased while the potential for self-serving TMT actions may increase. Meta-analytic results have indicated that working interdependently is less critical in conditions of high munificence, with performance advantages to CEO duality (i.e., structural TMT-board coordination) accruing only in low munificent environments (Boyd, 1995).

Overall, when growth opportunities abound, there is less pressure for differentiated opportunity identification and formation (Barney, Foss, & Lyngsie, 2018). Attention to working independently remains critical for task execution in terms of the TMT's operational focus and the board's oversight. However, demands for working interdependently are eased somewhat given the resource-rich environment's room for error and numerous opportunities for growth.

Proposition 2. Environmental munificence weakens the effect of attention to working interdependently on system effectiveness by providing numerous growth opportunities and greater margin for error.

Complexity

Whereas munificence reflects an abundance of growth opportunities, complexity refers to the competitive landscape (i.e., number, size, and leadership position of industry rivals). Complex environments

have more intense competition and greater pressure to manage change. Alternatively, a lack of complexity is seen in more monopolistic industries, with limited or constrained competition (Keats & Hitt, 1988; Porter, 1980). Along with increasing complexity comes the need to carefully manage capital allocation decisions among business units (Arrfelt, Wiseman, McNamara, & Hult, 2015), so an awareness across the strategic leadership system of competitive trends and internal resource needs is paramount. Research on environmental complexity has pointed to the critical role of information exchange and depth of industry knowledge as sources of potential competitive advantage (Ferrier, 2001; Hambrick et al., 2005). Whereas working independently gains a relative premium in conditions of high environmental munificence, the importance of working interdependently intensifies in highly complex environments given the need for broad capture and integration of board and TMT knowledge.

With its focus on industry competition, conditions of environmental complexity make working interdependently more critical for boards and TMTs. Both groups need to be able to exchange and utilize experience and knowledge about competitive patterns to identify and pursue opportunities to gain market share. In complex environments, firms require more innovation or cost efficiencies to maintain competitive positioning; thus, combined awareness of industry trends or novel solutions is crucial relative to a separate focus on internal TMT execution or independent board functioning. As an industry evolves, strategic visioning as a shared task helps reinforce a shared future and clarify long-term expectations, while aligning goals enables a shared understanding of how distinct tasks and shared tasks can be more effectively layered (e.g., Brandes, Dharwadkar, & Suh, 2016). Including the board's perceptions of industry competition can further enhance environmental scanning and understanding of market categories, with implications for firm performance (Cattani, Porac, & Thomas, 2017; McNamara, Luce, & Thompson, 2002; Oehmichen et al., 2017). Given the advantages of specialized knowledge and efficient information processing in complex environments (Sharfman, Dean, Dess, & Rasheed, 1991), TMT informational faultlines have been shown to be positively related to firm performance in conditions of high complexity (Cooper et al., 2014).

Overall, in highly complex environments, competitive intensity places a premium on working interdependently as it facilitates awareness of industry trends matched to internal resources, as well as generation of novel or cost-efficient solutions, assisting

the board in fulfilling their advising-related tasks and the TMT in fulfilling their strategy formulation-related tasks. Especially in conditions of complexity, an overreliance on working independently not only creates dysfunctional intergroup dynamics but also increases volatility in firm performance outcomes (Adams, Almeida, & Ferreira, 2005; Dalton et al., 2007). External complexity reinforces the importance of shared task effectiveness, making it critical for boards and TMTs to work interdependently for system effectiveness.

Proposition 3. Environmental complexity strengthens the effect of attention to working interdependently on system effectiveness by creating a premium for matching industry competitive pressures with internal resources.

Dynamism

Environmental dynamism has been conceptualized as market instability (in terms of industry changes) and as a lack of predictability among stakeholder relationships (between customers, suppliers, regulatory agencies, and competitors [Dess & Beard, 1984; Keats & Hitt, 1988; Miller, Ogilvie, & Glick, 2006]). Highly dynamic environments have greater ambiguity in means–end relationships (Siggelkow & Rivkin, 2005), more contingencies to examine, and greater variance among organizations in potential strategic responses (Hambrick & Abrahamson, 1995). Put differently, high levels of dynamism tend to raise the stakes around choices of tactics and strategies, with increasing job demands and more external stimuli to filter (Hambrick et al., 2005). Bourgeois and Eisenhardt (1988) discussed the paradoxes in dynamic environments of empowering the CEO and TMT simultaneously, as well as pursuing risk alongside safe, incremental implementation. We extend their argument to the board and TMT simultaneously with the tensions of their group and shared tasks. While complexity focuses on competitors, dynamism captures multiple stakeholders and ambiguities in relationships with rivals, capital suppliers, value-chain partners, etc., raising the bar for attention to working both independently and interdependently.

Conditions of greater unpredictability (El Sawy, Malhotra, Park, & Pavlou, 2010) intensify the pressure for strategic leadership systems to attend to working independently and interdependently. Greater ambiguity puts pressure on goal alignment, heightening the importance of the shared task of strategic visioning to help unify the distinct groups. In addition, boards are increasingly expected to intimately understand the

potential risk exposure and internal workings of the organization, which change more frequently in a dynamic environment. Thus, information processing as a shared task requires communication regarding technological and regulatory changes, both forthcoming and potential reforms. The TMT must be clear about their chosen initiatives, how tactics serve their various functions, and how the business model is expected to yield results, so the board can properly vet resource requests and prioritize capital needs. The importance of working independently likewise remains strong, as boards and TMTs must fulfill their distinct tasks to compete in conditions of high dynamism. To meet the demands of dynamic environments, TMTs and boards must also coordinate efforts to overcome challenges associated with information processing (Cooper et al., 2014; Eisenhardt, Furr, & Bingham, 2010). Hambrick and colleagues (2015) suggested that dynamic environments require more monitoring as well as more creativity in decision making, as a diversity of knowledge inputs is especially helpful in dealing with external changes (Cannella, Park, & Lee, 2008). Prior research has reported that TMTs with more diverse functional specialties tend to take bolder and more novel competitive actions, but do so more slowly (Hambrick, Cho, & Chen, 1996). In addition, including the board's inputs may yield even more innovative actions, but further slow decision making and result in missed opportunities unless work processes are highly efficient (Cooper et al., 2014).

Overall, environmental dynamism requires attention to working both independently and interdependently to enhance system effectiveness. Independence in board monitoring, for example, has been linked to stronger firm performance when facing greater technological change (Walters et al., 2010), while TMT focus on innovation rather than efficiency offers performance advantages in dynamic environments (Garg, Walters, & Priem, 2003; Lyon & Ferrier, 2002). External conditions of dynamism demand rapid fulfillment of both distinct group and distinct shared tasks—making it critical for boards and TMTs to emphasize attention to working independently and interdependently for system effectiveness.

Proposition 4. Environmental dynamism strengthens the effect of attention to (a) working interdependently and (b) working independently on system effectiveness by intensifying the demand for rapid response and realignment.

DUAL TENSION IN THE CHANGING WORLD, CHANGING PRACTICE

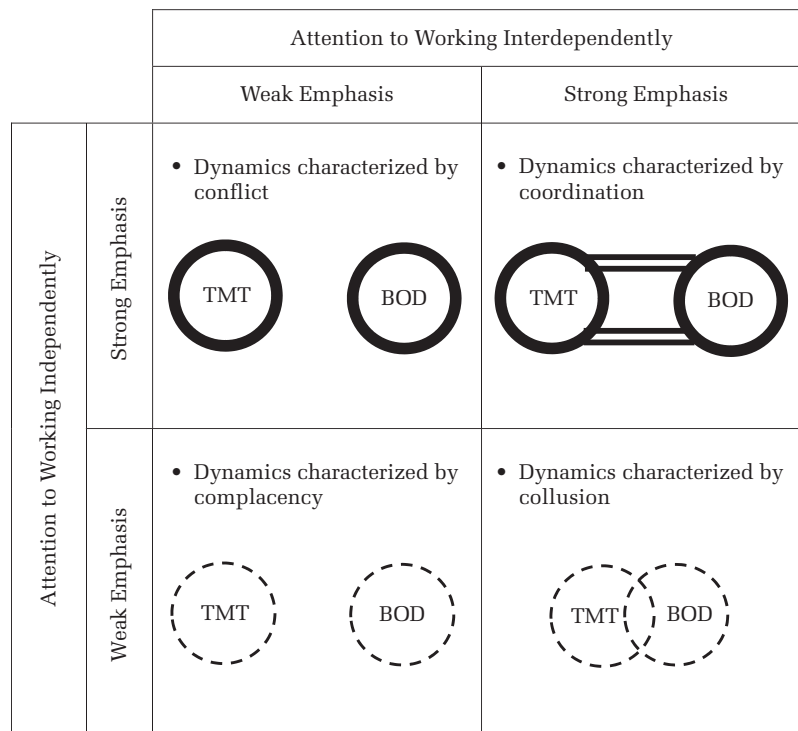
Managing the dual tension of attention to working independently and interdependently represents a real challenge for boards and TMTs today. Based on the theory developed above and shown in Figure 1, we now translate this theory into a practical framework to assess where firms fall in their current approach to work processes and how their placement relative to their competitive environment informs their potential effectiveness, and offer suggestions on how they may address any discrepancies. Conceptually, our theorizing on the influence of attention to working independently and interdependently on system effectiveness creates a 2×2 framework reflecting dynamics between TMTs and boards (see Figure 2). We discuss our axes as strong–weak attention, as opposed to high–low levels, to convey that our theory advocates a synergy and alignment perspective, rather than a balance perspective. We do not suggest that boards and TMTs should spend equal time working independently and interdependently, but rather embrace a dual emphasis to facilitate aligning activities with appropriate work processes and environmental demands.

A Framework for Strategic Leaders

Although the axes of our framework represent continuous variables, for illustrative purposes we focus on quadrants in order to provide a useful tool for strategic leaders to assess their management of the dual tension. The top-left quadrant of Figure 2 reflects strong attention to working independently and weak attention to working interdependently. This combination is consistent with structural prescriptions from agency theory, yet challenges the system's ability to integrate diverse knowledge and understand alternative perspectives. An over-emphasis on independence to the neglect of interdependence may engender conflict between the two groups. Although some task-related conflict can be beneficial (Simons & Peterson, 2000), dysfunctional conflict or antagonistic exchanges can indicate that the system is operating in this quadrant. If members perceive the system to be operating as two heavily fortified silos, with no bridge and frequent conflict between them, they are likely operating in the top-left quadrant.

With weak attention to working independently, the bottom row of Figure 2 reflects the board and TMT dynamics that motivated the development of

FIGURE 2
Framework for Diagnosing System Dynamics



Note: TMT = Top management team; BOD = Board of directors.

agency theory. As corporations grew in scope and ownership became more diffuse, concerns arose over a lack of independence limiting the board's ability to fulfill its fiduciary responsibility and represent owners' interests. The bottom-left quadrant, which pairs weak attention to working independently and interdependently, may be characterized by complacency (e.g., inertia, boards and TMTs rubber-stamping decisions), whereas operating in the bottom-right quadrant may manifest as intergroup dynamics characterized by collusion. With strong attention to working interdependently and weak attention to working independently, the bottom-right quadrant may be the trickiest region for strategic leaders to diagnose, as they may struggle to identify the line between collaboration and collusion. To use the framework as a self-diagnostic tool, we suggest that strategic leaders evaluate the extent to which their system has boundaries in structure and process, with weak boundaries indicating that they are likely operating in the bottom-right quadrant.

While agency theorists recognized the downside of weak attention to working independently, leading to prescriptions around ownership and control

(Beatty & Zajac, 1994; Daily & Dalton, 1994), their solutions addressed only one part of the tension, missing the need for working interdependently. The top-right quadrant, which combines a strong emphasis on attention to working independently and interdependently, is consistent with MTS prescriptions (Luciano et al., 2018; Mathieu et al., 2018). MTS theory has noted the importance of the separation afforded by working independently as well as the integration afforded by working interdependently to facilitate within- and between-team coordination and, in turn, system effectiveness (Davison et al., 2012; Marks et al., 2005). Strategic leadership systems operating in the top-right quadrant have intergroup dynamics characterized by coordination, which represents not merging the two groups, but rather bridging between the two strong groups.

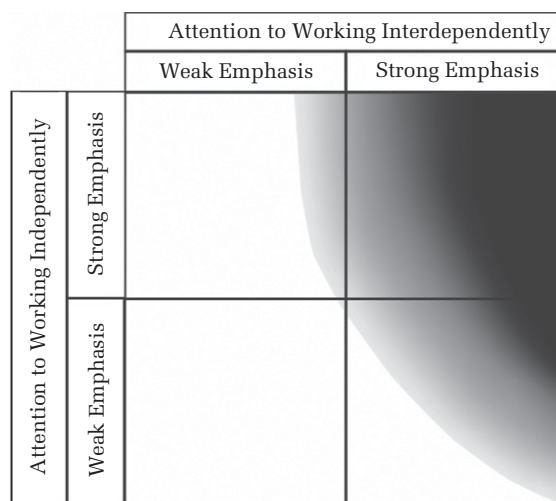
Zones of Effectiveness

As theorized in our model, the combination of attention to working independently and interdependently is important for system effectiveness. Therefore, we suggest that, all else equal, strategic

leadership systems that place a strong emphasis on attention to working independently and interdependently will outperform those with weak attention to either (or both). However, as we argued in our moderation propositions, there may be different zones, or regions, of effectiveness depending on environmental characteristics, which are depicted in Figures 3a–3c.

The term zone of effectiveness reflects the combination of attention to working independently and interdependently that yields the “sweet spot” for system effectiveness, as depicted by the darkest shading area and slowly fading (diminishing in effectiveness) as systems move away from desirable combinations. As shown in Figure 3a, and argued in Proposition 2, environmental munificence weakens the effect of attention to working interdependently, which conceptually expands the zone of effectiveness from the top-right quadrant into the top-left quadrant. More specifically, in an environment with high munificence, attention to working independently maintains its importance for group performance. However, the requirement for working interdependently weakens given greater margin for error and multiple paths to pursue the superordinate goal. Alternatively, as shown in Figure 3b and argued in Proposition 3, environmental complexity

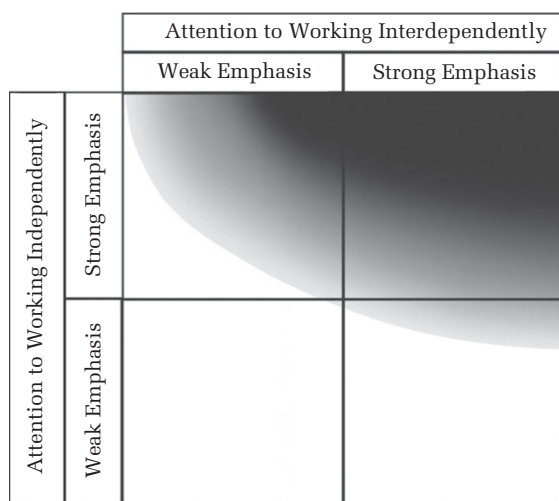
FIGURE 3b
Zones of System Effectiveness in Different Environments: High Complexity



Notes: Shading represents the level of strategic leadership system effectiveness. The darker the shading the higher the level of system effectiveness.

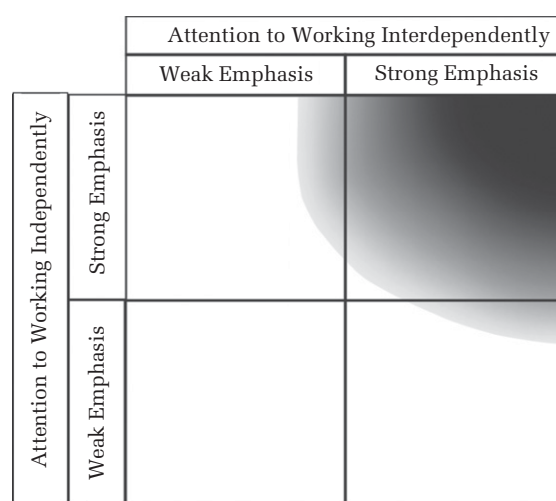
strengthens the effect of attention to working interdependently, which conceptually expands the zone of effectiveness from the top-right into the bottom-right quadrant. In an environment with high complexity,

FIGURE 3a
Zones of System Effectiveness in Different Environments: High Munificence



Notes: Shading represents the level of strategic leadership system effectiveness. The darker the shading the higher the level of system effectiveness.

FIGURE 3c
Zones of System Effectiveness in Different Environments: High Dynamism



Notes: Shading represents the level of strategic leadership system effectiveness. The darker the shading the higher the level of system effectiveness.

attention to working interdependently increases its importance as awareness across the strategic leadership system of competitive trends and internal resource needs is paramount to inform capital allocation decisions. Maintaining sufficient independence also remains important, particularly for the board to fulfill its distinct tasks, but the relative impact is weaker in comparison. Finally, as shown in Figure 3c and argued in Proposition 4, environmental dynamism strengthens the effect of attention to working independently and interdependently, thereby shrinking the zone of effectiveness within the top-right quadrant. Environments high on dynamism require more monitoring as well as more informed and creative decision making (Hambrick et al., 2015). Rapid response is necessary to capitalize on opportunities but timely and unified efforts are challenged by ambiguity. In short, dynamism strengthens the importance of efficiently capturing and integrating diverse perspectives to manage the demand for rapid response and realignment. Cumulatively, these three figures depict how our overarching theoretical model (Figure 1) is flexible and adaptable as it explains that while attention to working both independently and interdependently is necessary, the relative importance may vary according to the nature of environmental turbulence.

Practices to Support Management of Dual Tension

Whereas environmental characteristics may strengthen or weaken the importance of attention to working independently and interdependently, strategic leadership systems in any operating environment are well served by developing practices that support both. Research on strategic leadership has tended to focus on mechanisms that separate or link the TMT and board (e.g., CEO-only structures [Joseph, Ocasio, & McDonnell, 2014], director ownership [Bhagat & Bolton, 2013]). Although these mechanisms may be important, as interventions they are limited in that they fail to acknowledge underlying processes that more proximally influence system effectiveness. In general, practices targeted at attention to working independently enable efficiency in the execution and evolution of intended strategies, whereas practices targeted at attention to working interdependently support it by building awareness, trust, and integrative complexity ("the ability to differentiate among and integrate multiple perspectives" [Wong, Ormiston, & Tetlock, 2011: 1208]) at the system level. Put differently, coordination of understanding and action facilitate board and TMT performance of their group and system tasks. Herein,

we provide examples of practices to support working independently and interdependently to help strategic leaders better design and implement them.

Attention to working independently. Practices that support attention to working independently reinforce boundaries between the board and TMT and reflect some structural elements that are foundational to agency prescriptions. For example, a compositional focus on board independence, separation of CEO and chair roles, appointment of a lone independent director and use of executive sessions (a separate meeting including only independent board members) are all practices that support attention to working independently. In addition, practices that decentralize decision making and encourage delegation to empower boards and TMTs, as well as their subgroups, support tactical choices that allow intended strategies to evolve to their emergent or realized states. Empowering the board and TMT to work separately acknowledges their distinct roles and enables each group to choose tactics that heighten their responsiveness to opportunities and threats and develop attention structures to specialize on group tasks (e.g., Stevens, Moray, Bruneel, & Clarysse, 2015). Thus, discretion to implement tactics supports working independently while making use of coordinated understanding and action.

Attention to working interdependently. The other side of the dual tension, attention to working interdependently, involves regular interaction and exposure to prepare the TMT and board to face both distinct group and distinct shared task challenges, and in so doing, to avoid inertia (Barker, Patterson, & Mueller, 2001; Hoppmann, Naegel, & Girod, 2019). Working interdependently enables capture and integration of diverse perspectives from across the board and TMT, applying these gains in more informed solutions, resource allocation, and risk management. Practices that support working interdependently facilitate increased awareness of efforts and potentially conflicting priorities embedded in the board and TMT. For example, many corporations now hold an annual strategy session, dedicating one board meeting each year for the TMT and board to together revisit the strategic vision and long-term planning activities, and conduct a holistic review of the shared frame and its corresponding strategies and resource needs. Ongoing attention to working interdependently takes the form of director site visits, information-gathering between the TMT and board (which often comprise dyadic, informal communications in advance of formal board meetings), and social interactions that build camaraderie and strengthen organizational identification for

the board and TMT (e.g., Boivie, Lange, McDonald, & Westphal, 2011). Industry conferences and other professional training offer strategic leaders the opportunity to stay apprised of trends and concerns facing their organization, enabling both the TMT and board to assess the relevance of embedded expertise. Attention to working interdependently can also improve specific practices such as incentive design. Any concrete relationship between TMT and board ownership and performance outcomes has evaded scholarly understanding (Dalton, Daily, Certo, & Roengpitya, 2003), as views on incentive devices often reflect a focus on independence and arms-length contracting. Working interdependently can offset system needs and default reliance on outside consultants (e.g., executive compensation consultants) as coordinated understanding of TMT and board values and temporal horizon can inform the choice of pay mechanisms, their thresholds, and delivery, to increase efficiency in compensation.

Combination. Although there have been some recent efforts to examine the influence of subgroups including board committees (Brandes et al., 2016) and strategic leadership constellations (Ma & Seidl, 2018), extant scholarship has offered few evidence-based practices for systems to emphasize attention to working both independently and interdependently. Indeed, meta-analytical evidence has suggested highly contextualized idiosyncrasies in how board independence mitigates TMT misconduct (Neville, Bryan, Post, & Ward, 2019). Some qualitative work, however, has advanced routines and accountability practices that support the dual focus on working independently and interdependently. For example, publicly acknowledging the shifts between challenging and supporting the other group (board, TMT) has been shown to build trust that is necessary for establishing accountability at the system level (Nicholson et al., 2017). Similarly, institutionalizing routines around independent and interdependent activities, such as budgeting and strategic planning, allow for the coordination of understanding and action that reflect board and TMT inputs and outputs (Parker, 2007). Drawing further from practical guidance, the National Association of Corporate Directors offers certification and ongoing training programs to support the unique responsibilities of boards, from general oversight and risk management to the specifics of succession planning and incentive design. Such educational programs encourage board accountability, reflecting recommendations that directors be “engaged but non-executive, challenging but supportive, and independent but involved” (McNulty, Roberts, &

Stiles, 2005: S6). These types of programs have the potential to help train board members to effectively attend to working both independently and interdependently.

Application. Bringing it all together, strategic leaders can better predict the impact of interventions targeted at encouraging attention to working independently and interdependently by combining the insights from the 2×2 framework to assess their current state (Figure 2) relative to the zones of effectiveness for their environment (Figures 3a–3c). For example, a firm that strongly emphasizes working independently and is operating in a highly munificent environment may only experience modest performance increases after enhancing attention to working interdependently. Alternatively, a similar firm operating in an environment with high dynamism would likely experience substantial performance improvements after enhancing attention to working interdependently. Further, these conditions themselves are dynamic, necessitating ongoing appraisal of the alignment between work processes and environmental demands (Lynall et al., 2003). For example, the utility of CEO duality as a structural mechanism has been shown to be contingent upon stakeholder views and the priority of those opinions (Krause, Filatotchev, & Bruton, 2016). Accordingly, our theorizing lays the groundwork for future research on the efficacy of governance interventions, with a warning to consider the current state of strategic leadership system work processes in tandem with the environment.

DISCUSSION

Drawing from systems theory (Katz & Kahn, 1978; Mathieu et al., 2001), we expanded existing theories of strategic leadership to build new theory that is better suited to the broader responsibilities of the TMT and board in today’s turbulent environment. Our theorizing offers a new perspective on the TMT–board relationship as one in which the TMT and board comprise a strategic-oriented multiteam system, which we refer to as a *strategic leadership system*. We suggest that TMTs and boards share a superordinate goal of superior firm performance, which requires the accomplishment of both group and shared tasks. Strategic leadership systems that emphasize attention to working both independently and interdependently are positioned to better coordinate their actions and understanding, which supports system effectiveness. Although attention to both work processes is important for all

strategic leadership systems, our theory articulates how various environmental characteristics place disproportionate emphasis on working independently or interdependently, which shifts the zones of effectiveness.

Implications

Our theory of strategic leadership system functioning adopts a multidisciplinary approach, drawing from and contributing to macro- and micro-oriented management literatures. In short, we build new theory on how strategic leadership systems function by adopting a systems perspective that expands the conversation about strategic leadership from the historical emphasis on independence and control to include interdependence and coordination. Accordingly, our paper speaks to the promise of interdisciplinary research and how theories housed

primarily in one topical area may offer important new perspectives to advance our understanding in distinct streams of research (Mathieu & Chen, 2011).

Notably, in Table 1 we provide an overview of how our theorizing updates assumptions about strategic leadership and creates new avenues for future research. Although it seems almost trite to state that the world is faster and more complicated than when agency theory was developed (Jensen & Meckling, 1976), the changes nonetheless have important implications for TMTs and boards and the relative utility of previous theoretical prescriptions for corporate governance. Given the importance of firm performance to the field of strategic management, new perspectives on how to orchestrate processes between the board and TMT, two groups with outsized influence on firm outcomes, are both needed and promising. The increased demands that organizations face significantly impact both the TMT and

TABLE 1
Revisiting Assumptions of Strategic Leadership and Areas for Future Research

Dimension	Old Assumption	New Assumption	Future Research
Functioning	The TMT and board should operate as separate groups, especially in stable and munificent environments.	The TMT and board should operate as a strategic leadership system, especially in turbulent environments.	• Empirical examination of Figures 3a–3c
Structure	Structural independence is needed to guard against collusion between the TMT and board.	A systems approach encourages attention to working independently <i>and</i> interdependently, acknowledging both structure <i>and</i> process.	• Exploration of varying system structures and their influence on system processes
Goals	The TMT and board have unique and often conflicting goals (e.g., short-term vs. long-term profitability).	The TMT and board have unique component group goals <i>and</i> a shared superordinate goal of superior firm performance.	• Unpack the influence of varying forms of goal discordancy
Tasks	The TMT and board should focus on their distinct group tasks (e.g., strategy formulation and daily operations vs. monitoring and advising, respectively).	The TMT and board should focus on their respective group tasks <i>and</i> shared tasks of strategic visioning, aligning goals and processing information.	• Measurement of shared tasks
Working independently	TMT and board within-team processes (e.g., behavioral integration) support TMT and board performance, respectively.	TMT and board attention to working independently supports task performance of both groups.	• Cross-over effects of working independently on the other group's performance
Working interdependently	The TMT and board working together harms shareholders.	Attention to working interdependently supports both distinct group and shared task performance.	• Cross-level effects of working interdependently on group performance
Intergroup dynamics	Intergroup dynamics between the TMT and board characterized by power struggles and conflict.	Intergroup dynamics between the TMT and board characterized by coordination.	• Relational event modeling of actions and interactions between the TMT and board
Membership	The CEO is the critical boundary spanner between the TMT and board.	Multiple group members could be boundary spanners.	• Use of liaison teams • Use of committees • Consideration of additional groups (e.g., analysts)

board in that neither can effectively fulfill their distinct tasks alone nor afford the process losses associated with poor coordination. As foreshadowed by previous work on structural and coordination modes in group tasks (Van de Ven & Delbecq, 1974; Van de Ven, Delbecq, & Koenig, 1976), as collective tasks become more difficult (low munificence), uncertain (high complexity), and variable (high dynamism), a lone emphasis on working independently or reliance upon structural connections is insufficient. In sum, the increase in demands necessitates more intersectional solutions—or, as our theory articulates, attention to working independently *and* interdependently to facilitate system effectiveness.

In terms of the broader theoretical implications underlying our multidisciplinary theorizing, we contribute to theory on strategic leadership system functioning. At the macro level, we respond to calls to broaden the conversation in corporate governance (Aguilera, Filatotchev, Gospel, & Jackson, 2008; Filatotchev & Boyd, 2009) by reconsidering agency theory's emphasis on independence in a way that illustrates the value of those insights while moving the domain forward to incorporate the importance of working interdependently. In addition, incorporating the shared tasks of strategic visioning, aligning goals, and processing information is an important expansion for the corporate governance literature, which has historically focused on group tasks or firm performance. To the MTS literature we contribute greater theoretical depth and precision on system functioning. Our theory incorporates and expands previous conceptualizations of system functioning (e.g., within-group processes supporting group task performance and between-group processes supporting shared task performance), illuminating the interplay across levels. We also contribute novel insights to both the MTS and corporate governance literatures on the role of environmental characteristics. Rather than assuming homogenous effects, we build theory on how facets of environmental turbulence (i.e., complexity, munificence, dynamism) strengthen or weaken the influence of attention to working independently or interdependently, which shifts the zones of effectiveness of a strategic leadership system. In contrast to collapsing work processes and aggregating environmental characteristics, as has often been done in the macro literature (cf. organizational restructuring [Karim, Carroll, & Long, 2016]), our approach enables more precise theorizing and actionable insights. This contribution is particularly important for the MTS literature as the MTS or organizational form has been embraced as ideal for

operating in complex and dynamic environments without fully theorizing why this might be (Zaccaro et al., 2012).

Our theorizing also offers several implications for practice. To promote the interpretability and applicability of our theorizing we included a 2×2 framework (Figure 2), which serves as a diagnostic tool to help strategic leaders assess where they fall in their current approach to work processes. We then illustrated how our moderation propositions would influence system effectiveness (Figure 3a–c) to illuminate how their placement on the 2×2 framework relative to their competitive environment informs their potential effectiveness. Combining insights from Figures 2 and 3, strategic leaders can better predict the impact of interventions targeted at encouraging attention to working independently and interdependently. Finally, we offered practices to support management of dual tension to inform strategic leaders on how to address discrepancies between their current and desired system state.

Future Research

Empirical testing. As for any new theoretical development, empirical testing of our propositions is among the important next steps and recommendations for future research. For example, a comparative case study of strategic leadership systems would likely be useful to examine how where companies fall in the quadrants of our framework relates to their effectiveness, especially relative to the environments they face. For quantitative investigations, proxy measures of environmental turbulence exist in the strategy literature (e.g., Cooper et al., 2014) and could be readily deployed for empirical investigation using survey or archival data. Alternatively, measures of shared task performance would need to be created and validated, but literatures offering conceptually similar measures could serve as a useful starting point (e.g., goal congruence [Sanders & Hambrick, 2007], information sharing [Mesmer-Magnus & DeChurch, 2009], strategic vision [Gavetti & Rivkin, 2007]). Examining and expanding our theorizing, future research could adopt a network approach and examine the sequences of actions and interactions between members of the strategic leadership system using relational event modeling (Butts, 2008). This would provide insights as to the optimal patterns of working independently and interdependently to achieve system effectiveness (Burt & Merluzzi, 2016; Schechter, 2017)—the zones of which could

be examined as regions of significance for greater theoretical precision.

Mechanisms. Future research should also investigate structural and process-related mechanisms that may support working independently and interdependently, both uniquely and together. Perhaps one of the most dangerous unintended consequences from agency theory has been the lack of coordination between nonoverlapping TMTs and boards, or consolidating power into gatekeeper CEOs who traditionally control any contact and coordination between the TMT and board (Joseph et al., 2014; Tuggle, Schnatterly, & Johnson, 2010). A strategic leadership system would likely benefit from expanding the accountability for coordination to include other boundary spanners or integration or liaison teams, as has been done in the MTS literature (Davison et al., 2012). For example, utilizing the role of the devil's advocate (Herbert & Estes, 1977), or "red teams" from the military (Defense Science Board, 2003), as well as procedural communication (Lehmann-Willenbrock, Allen, & Kauffeld, 2013), may elicit a greater diversity of inputs and encourage the constructive confrontations that heighten decision-making quality (Kellermanns, Floyd, Pearson, & Spencer, 2008). Alternatively, strategic leadership systems may benefit from linkages between the TMT and board, including a high degree of integrated coordination (Zaccaro et al., 2012).

At its base, our theory's advancement of working interdependently suggests more dynamic and ongoing interactions between the board and TMT. Interactions can utilize the board's expertise and resources without compromising managerial discretion with board overreach into day-to-day decisions. Delving into the intersection of structure and process, it would be interesting to explore how strategic leadership systems enact attention to working independently and interdependently and how various forms (e.g., cross-team committees, CEO-only boards) influence proximal and distal system outcomes. As a part of this research it will be particularly important to explore different practices, ideally conducting field-based experiments, to enable the creation of actionable and useful guidelines to help strategic leadership systems improve their functioning. Our theorizing highlights the importance of practices that will support the combination of working independently and interdependently. However, given the potential for countervailing forces in MTSs (DeChurch & Zaccaro, 2013; Rico, Hinsz, Davison, & Salas, 2018; Shuffler & Carter, 2018) studies that combine multiple practices are worthy of future research as they may create a variety of effects (e.g., strengthening, reversing).

Additional theorizing. Our theorizing regarding the TMT and board as a strategic leadership system establishes an important bridgehead between the macro- and micro-management literatures, which opens up numerous other constructs to be explored. We join other MTS scholars in calling for research on how group and system emergent states develop and change over time, in particular the development of affective (e.g., trust, cohesion), cognitive (e.g., shared mental models; TMSs), and motivational (e.g., confidence, willingness to put forth effort) properties (National Research Council, 2014). Notably, identity-related topics have appeared in both the MTS (Mell, DeChurch, Contractor, & Leenders, 2019; Porck, Matta, Hollenbeck, Oh, Lanaj, & Lee, 2019) and corporate governance (Cannella, Jones, & Withers, 2015; Hillman, Nicholson, & Shropshire, 2008) literatures as an influential construct worthy of consideration in the context. We also call for greater consideration of distal system outcomes. In much of the prior MTS research, system members have been seen as performing a specific discrete task, where achievement of the superordinate goal is clearly within their purview. In a strategic leadership system, firm performance is a much more distal outcome given the influence of numerous internal and external factors on measurable performance. Future research should consider these relationships, with particular emphasis on different dimensions of firm performance (e.g., financial, social, environmental), temporal horizons (e.g., short-term, long-term), and potential moderating variables between proximal and distal outcomes that may result in conflicting performance assessments, such as firms "outperforming" rivals on strategic leadership system tasks yet underperforming in traditional financial metrics.

Revisiting Key Assumptions and Boundary Conditions

As with any theory, there are assumptions and boundary conditions to our theory that future research would do well to explore. Earlier, we noted the assumption that board and TMT members have the requisite knowledge, skills, and abilities to fulfill their individual primary roles. This allowed us to focus on processes as opposed to composition; however, the individual characteristics of TMT and board members and the combination thereof may also influence system functioning (Pitcher & Smith, 2001). Consistent with Luciano and colleagues (2018), if systems lack the requisite variety necessitated by their environment, it will impair their work processes and harm system performance. Future research would also

benefit from considering the churn of component group members. Although the MTS literature has typically examined systems with stable membership, several studies have examined change in membership of the TMT or board (e.g., Fee & Hadlock, 2003; Kor, 2006)—research that could be further informed by the group turnover literature (for reviews, see Hausknecht & Trevor, 2011; Heavey, Holwerda, & Hausknecht, 2013). Ensuring the appropriate level of turnover on both the TMT and board (Boone, Van Olffen, Van Witteloostuijn, & De Brabander, 2004; Desai, 2016), as well as attending to the value of diversity in the hiring (e.g., TMT) and nominating (e.g., board) processes, would bring more diverse perspectives to the strategic leadership system. The role and impact of powerful individuals, such as the CEO or majority shareholder, also offer nuance to our system-based prescriptions for corporate governance and would be worthwhile areas of future investigation. Likewise, consideration should be given to the hierarchical arrangement or power distribution of the TMT and board (Zaccaro et al., 2012) by establishing criteria for which strategic decisions the board will be asked to address—either in a strictly advisory or voting role. While there may be set dollar-amount decisions requiring the board's approval (e.g., acquisitions, capital investments), other TMT strategic and tactical decisions would likely benefit from the board's guidance (e.g., potential alliance formation, geographic expansion).

Another boundary condition is our theorizing about a system comprised of two groups with varying levels of within-group interdependence. Our theorizing applies to interdependent groups, not exclusively to teams. Prior research from the teams literature (LePine et al., 2008), including research on TMTs (Hambrick, Humphrey, & Gupta, 2015), has suggested that higher levels of interdependence strengthen the input–outcome relationship. By extension, for systems with high interdependence either within or between its collectives we suggest that the relationships presented in our propositions will be stronger. We also acknowledge that high within-team interdependence combined with weak between-team interdependence may lead to an overemphasis on within-team, as opposed to between-team, processes (Kanfer & Kerry, 2012), resulting in heightened importance of efforts to increase attention to working interdependently. In addition, prior MTS work has noted that coordination complexity increases when there are three or more teams in the system, as teams must determine not only when and how to coordinate, but

also with whom (Davison et al., 2012). Strategic leadership systems are primarily comprised of two focal groups, which mitigates those initial challenges. However, building on Roberto's (2003) conceptualization of intragroup TMT dynamics as a stable core and dynamic periphery, future research should consider the dynamics within subsystems (e.g., committees, strategic leadership constellations [Ma & Seidl, 2018]) and expand out to consider other critical stakeholders in the strategic leadership system (e.g., shareholders, auditors, analysts). Future theory and testing may also extend these insights to examine the implications for within-group dynamics (e.g., TMT behavioral integration; board power dynamics), as well as relationships with other interdependent groups (e.g., joint ventures, alliance partners) and connections to other organizations (e.g., board interlocks).

The final boundary condition of our theorizing was the focus on a strategic-oriented system. Traditionally, MTS research has empirically examined systems comprised of action-oriented teams performing constrained tasks (e.g., computer simulations of air force missions). These action-oriented teams are constrained by the task assigned to them and have somewhat limited discretion. Conversely, strategic-oriented systems are significantly less constrained and have not only more discretion but, notably, more alternatives and disproportionate influence on system outcomes (Finkelstein et al., 2009). The groups may also influence the level of one another's discretion or constrain opportunities by restricting resources, whether financial or informational. In short, in comparison to action-oriented MTSs, strategic leadership systems perform more ambiguous tasks, interface with a more changing environment, have greater discretion, and contain groups with potentially opposing functions, which puts a premium on determining an appropriate direction, aligning efforts, and carefully managing the system form.

Thus, future research should examine these relationships in different system contexts—in particular, relationships including the three shared tasks. These shared tasks are an underexamined intermediary step between system processes and more distal outcomes (e.g., firm performance) and are likely context dependent (Mathieu, 2012; Mathieu et al., 2001). Regarding the three shared tasks, we note that the level of member discretion, number of potential directions, and reward system created by the purview of one of the component groups create a premium on goal alignment. Goal misalignment can occur in action-oriented systems; however, the potential and ability to pursue very different

directions intensifies the importance of goal alignment in strategic leadership systems. Similarly, processing information is likely to be important across all types of MTSs; however, its importance in strategic-oriented systems is intensified by the nature of the task and complexity of the environment. In contrast to hidden profile simulations where system members are provided the universe of potentially relevant information, in a strategic leadership system the members must first seek out and filter the universe of potentially relevant information through their own lenses before they can begin to share and integrate information. Strategic visioning is perhaps the most distinctive function to strategic-oriented systems. Although action-oriented teams engage in transition processes (e.g., mission analysis, formulation, and planning [Marks et al., 2001]), they are constrained by the mission to figure out how to get from *A* to *B*, as opposed to creating a vision of where the system should be going (*B*, *C*, or *Z*).

In addition to the shared tasks, it is noteworthy that in a strategic leadership system the distinct group functions can be tricky to reconcile (e.g., Sundaramurthy & Lewis, 2003). Whereas the board's monitoring function limits the discretion of the TMT, the advising function potentially expands it—as the TMT may gain additional options to consider. This distinction highlights the importance of considering the influence of multiple functions and goals in MTS research, as more complex and contradictory functions and goals heighten the importance of attention to working independently and interdependently for system effectiveness. Along similar lines, strategic leadership systems likely have relatively higher levels of goal discordancy compared to the action-oriented MTS in the literature, as one team is tasked with monitoring the other. The broader systems literature would benefit from a systematic investigation of the varying forms of goal discordancy (e.g., level of incompatibility of goals vs. differences in goal priority at different levels of the goal hierarchy). As future research expands to other system contexts, it is important to identify factors driving differences in relationships across studies, enabling the expansion and refinement of existing typologies (Luciano et al., 2018; Zaccaro et al., 2012) as well as a robust theoretical base for systems research.

CONCLUSION

Our theory integrates insights from the corporate governance and MTS literatures to provide a novel,

more holistic perspective of TMTs and boards as a strategic leadership system. We update the assumptions of agency theory for the expanded expectations and responsibilities of boards and TMTs operating in more turbulent environments. Our theorizing offers numerous practical recommendations for strategic leaders—with a cautionary warning to consider the current state of strategic leadership system work processes in tandem with the environment.

REFERENCES

- Adams, R. B., Almeida, H., & Ferreira, D. 2005. Powerful CEOs and their impact on corporate performance. *Review of Financial Studies*, 18: 1403–1432.
- Aguilera, R. V., Filatotchev, I., Gospel, H., & Jackson, G. 2008. An organizational approach to comparative corporate governance: Costs, contingencies, and complementarities. *Organization Science*, 19: 475–492.
- Arrfelt, M., Wiseman, R. M., McNamara, G., & Hult, G. T. M. 2015. Examining a key corporate role: The influence of capital allocation competency on business unit performance. *Strategic Management Journal*, 36: 1017–1034.
- Austin, J. R. 2003. Transactive memory in organizational groups: The effects of content, consensus, specialization, and accuracy on group performance. *Journal of Applied Psychology*, 88: 866–878.
- Bamiatzi, V., Bozos, K., Cavusgil, S. T., & Hult, G. T. M. 2016. Revisiting the firm, industry, and country effects on profitability under recessionary and expansion periods: A multilevel analysis. *Strategic Management Journal*, 37: 1448–1471.
- Barker, V. L., Patterson, P. W., & Mueller, G. C. 2001. Organizational causes and strategic consequences of the extent of top management team replacement during turnaround attempts. *Journal of Management Studies*, 38: 235–269.
- Barney, J. B., Foss, N. J., & Lyngsie, J. 2018. The role of senior management in opportunity formation: Direct involvement or reactive selection? *Strategic Management Journal*, 39: 1325–1349.
- Barrick, M. R., Bradley, B. H., Kristof-Brown, A. L., & Colbert, A. E. 2007. The moderating role of top management team interdependence: Implications for real teams and working groups. *Academy of Management Journal*, 50: 544–557.
- Baum, J. R., & Wally, S. 2003. Strategic decision speed and firm performance. *Strategic Management Journal*, 24: 1107–1129.
- Beatty, R. P., & Zajac, E. J. 1994. Managerial incentives, monitoring, and risk bearing: A study of executive compensation, ownership, and board structure in

- initial public offerings. *Administrative Science Quarterly*, 39: 313–335.
- Bhagat, S., & Bolton, B. 2013. Director ownership, governance, and performance. *Journal of Financial and Quantitative Analysis*, 48: 105–135.
- Bigley, G. A., & Wiersema, M. F. 2002. New CEOs and corporate strategic refocusing: How experience as heir apparent influences the use of power. *Administrative Science Quarterly*, 47: 707–727.
- Bloom, M., & Michel, J. G. 2002. The relationships among organizational context, pay dispersion, and managerial turnover. *Academy of Management Journal*, 45: 33–42.
- Boivie, S., Bednar, M. K., Aguilera, R. V., & Andrus, J. L. 2016. Are boards designed to fail? The implausibility of effective board monitoring. *Academy of Management Annals*, 10: 319–407.
- Boivie, S., Lange, D., McDonald, M. L., & Westphal, J. D. 2011. Me or we: The effects of CEO organizational identification on agency costs. *Academy of Management Journal*, 54: 551–576.
- Boone, C., Van Olffen, W., Van Witteloostuijn, A., & De Brabander, B. 2004. The genesis of top management team diversity: Selective turnover among top management teams in Dutch newspaper publishing, 1970–94. *Academy of Management Journal*, 47: 633–656.
- Bourgeois, L. J., & Eisenhardt, K. M. 1988. Strategic decision-processes in high-velocity environments—4 cases in the microcomputer industry. *Management Science*, 34: 816–835.
- Boyd, B. K. 1995. CEO duality and firm performance: A contingency model. *Strategic Management Journal*, 16: 301–312.
- Brandes, P., Dharwadkar, R., & Suh, S. 2016. I know something you don't know! The role of linking pin directors in monitoring and incentive alignment. *Strategic Management Journal*, 37: 964–981.
- Bromiley, P., & Rau, D. 2016. Social, behavioral, and cognitive influences on upper echelons during strategy process: A literature review. *Journal of Management*, 42: 174–202.
- Buescher, B., & Viguerie, P. 2014. How US healthcare companies can thrive amid disruption. Retrieved from <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/how-us-healthcare-companies-can-thrive-amid-disruption>.
- Burt, R. S., & Merluzzi, J. 2016. Network oscillation. *Academy of Management Discoveries*, 2: 368–391.
- Butts, C. T. 2008. A relational event framework for social action. *Sociological Methodology*, 38: 155–200.
- Cannella, A. A., Jr., Jones, C. D., & Withers, M. C. 2015. Family- versus lone-founder-controlled public corporations: Social identity theory and boards of directors. *Academy of Management Journal*, 58: 436–459.
- Cannella, A. A., Park, J. H., & Lee, H. U. 2008. Top management team functional background diversity and firm performance: Examining the roles of team member colocation and environmental uncertainty. *Academy of Management Journal*, 51: 768–784.
- Carpenter, M. A. 2002. The implications of strategy and social context for the relationship between top management team heterogeneity and firm performance. *Strategic Management Journal*, 23: 275–284.
- Cattani, G., Porac, J. F., & Thomas, H. 2017. Categories and competition. *Strategic Management Journal*, 38: 64–92.
- Colbert, A. E., Kristof-Brown, A. L., Bradley, B. H., & Barrick, M. R. 2008. CEO transformational leadership: The role of goal importance congruence in top management teams. *Academy of Management Journal*, 51: 81–96.
- Collins, J. C., & Porras, J. I. 1996. Building your company's vision. *Harvard Business Review*, 74: 65–77.
- Cooper, D., Patel, P. C., & Thatcher, S. M. B. 2014. It depends: Environmental context and the effects of faultlines on top management team performance. *Organization Science*, 25: 633–652.
- Cronin, M. A., & Weingart, L. R. 2007. Representational gaps, information processing, and conflict in functionally diverse teams. *Academy of Management Review*, 32: 761–773.
- Daily, C. M., & Dalton, D. R. 1994. Bankruptcy and corporate governance: The impact of board composition and structure. *Academy of Management Journal*, 37: 1603–1617.
- Daily, C. M., Dalton, D. R., & Rajagopalan, N. 2003. Governance through ownership: Centuries of practice, decades of research. *Academy of Management Journal*, 46: 151–158.
- Dalton, D. R., Daily, C. M., Certo, S. T., & Roengpitya, R. 2003. Meta-analyses of financial performance and equity: Fusion or confusion? *Academy of Management Journal*, 46: 13–26.
- Dalton, D. R., Hitt, M. A., Certo, S. T., & Dalton, C. M. 2007. The fundamental agency problem and its mitigation: Independence, equity, and the market for corporate control. *Academy of Management Annals*, 1: 1–64.
- Daniels, D. S. 2013. The CEO today: Sharing leadership at the top, Point of view. Retrieved from <https://www.spencerstuart.com/research-and-insight/the-ceo-today-sharing-leadership-at-the-top>.
- Davison, R. B., Hollenbeck, J. R., Barnes, C. M., Slesman, D. J., & Ilgen, D. R. 2012. Coordinated action in multi-team systems. *Journal of Applied Psychology*, 97: 808–824.
- DeChurch, L. A., Burke, C. S., Shuffler, M. L., Lyons, R., Doty, D., & Salas, E. 2011. A historiometric analysis of

- leadership in mission critical multiteam environments. *The Leadership Quarterly*, 22: 152–169.
- DeChurch, L. A., & Marks, M. A. 2006. Leadership in multiteam systems. *Journal of Applied Psychology*, 91: 311–329.
- DeChurch, L. A., & Zaccaro, S. J. 2013. *Innovation in scientific multiteam systems: Confluent and countervailing forces*. Washington, D.C.: National Research Council.
- Deephouse, D. L. 1999. To be different, or to be the same? It's a question (and theory) of strategic balance. *Strategic Management Journal*, 20: 147–166.
- Defense Science Board. 2003. *The role and status of DoD red teaming activities*. Washington, D.C.: Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics.
- Desai, V. M. 2016. The behavioral theory of the (governed) firm: Corporate board influences on organizations' responses to performance shortfalls. *Academy of Management Journal*, 59: 860–879.
- Dess, G. G., & Beard, D. W. 1984. Dimensions of organizational task environments. *Administrative Science Quarterly*, 29: 52–73.
- De Vries, T. A., Hollenbeck, J. R., Davison, R. B., Walter, F., & Van der Vegt, G. S. 2016. Managing coordination in multiteam systems: Integrating micro and macro perspectives. *Academy of Management Journal*, 59: 1823–1844.
- Dowell, G. W. S., Shackell, M. B., & Stuart, N. V. 2011. Boards, CEOs, and surviving a financial crisis: Evidence from the internet shakeout. *Strategic Management Journal*, 32: 1025–1045.
- Edmondson, A. 1999. Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44: 350–383.
- Eisenhardt, K. M. 1989. Making fast strategic decisions in high-velocity environments. *Academy of Management Journal*, 32: 543–576.
- Eisenhardt, K. M., Furr, N. R., & Bingham, C. B. 2010. Microfoundations of performance: Balancing efficiency and flexibility in dynamic environments. *Organization Science*, 21: 1263–1275.
- El Sawy, O. A., Malhotra, A., Park, Y., & Pavlou, P. A. 2010. Seeking the configurations of digital ecodynamics: It takes three to tango. *Information Systems Research*, 21: 835–848.
- Fee, C. E., & Hadlock, C. J. 2003. Raids, rewards, and reputations in the market for managerial talent. *Review of Financial Studies*, 16: 1315–1357.
- Ferrier, W. J. 2001. Navigating the competitive landscape: The drivers and consequences of competitive aggressiveness. *Academy of Management Journal*, 44: 858–877.
- Filatotchev, I., & Boyd, B. K. 2009. Taking stock of corporate governance research while looking to the future. *Corporate Governance: An International Review*, 17: 257–265.
- Finkelstein, S., Hambrick, D. C., & Cannella, A. A. 2009. *Strategic leadership: Theory and research on executives, top management teams, and boards*. New York, NY: Oxford University Press.
- Finkelstein, S., Harvey, C., & Lawton, T. 2008. Vision by design: A reflexive approach to enterprise regeneration. *Journal of Business Strategy*, 29: 4–13.
- Finkelstein, S., & Mooney, A. C. 2003. Not the usual suspects: How to use board process to make boards better. *Academy of Management Executive*, 17: 101–113.
- Firth, B. M., Hollenbeck, J. R., Miles, J. E., Ilgen, D. R., & Barnes, C. M. 2015. Same page, different books: Extending representational gaps theory to enhance performance in multiteam systems. *Academy of Management Journal*, 58: 813–835.
- Gaertner, K. N., & Dovidio, J. F. 2000. *Reducing intergroup bias: The common ingroup identity model*. Philadelphia, PA: Psychology Press.
- Garg, V. K., Walters, B. A., & Priem, R. L. 2003. Chief executive scanning emphases, environmental dynamism, and manufacturing firm performance. *Strategic Management Journal*, 24: 725–744.
- Gavetti, G., & Rivkin, J. W. 2007. On the origin of strategy: Action and cognition over time. *Organization Science*, 18: 420–439.
- Geiler, P., & Renneboog, L. 2016. Executive remuneration and the payout decision. *Corporate Governance: An International Review*, 24: 42–63.
- Goll, I., & Rasheed, A. A. 2004. The moderating effect of environmental munificence and dynamism on the relationship between discretionary social responsibility and firm performance. *Journal of Business Ethics*, 49: 41–54.
- Hambrick, D. C. 1994. Top management groups: A conceptual integration and reconsideration of the team label. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior*, vol. 16: 171–214. Greenwich, CT: JAI Press.
- Hambrick, D. C. 2007. Upper echelons theory: An update. *Academy of Management Review*, 32: 334–343.
- Hambrick, D. C., & Abrahamson, E. 1995. Assessing managerial discretion across industries: A multimethod approach. *Academy of Management Journal*, 38: 1427–1441.
- Hambrick, D. C., Cho, T. S., & Chen, M.-J. 1996. The influence of top management team heterogeneity on firms' competitive moves. *Administrative Science Quarterly*, 41: 659–684.

- Hambrick, D. C., & Crossland, C. 2018. A strategy for behavioral strategy: Appraisal of small, midsize, and large tent conceptions of this embryonic community. *Behavioral Strategy in Perspective*, 39: 23–39.
- Hambrick, D. C., Finkelstein, S., & Mooney, A. C. 2005. Executive job demands: New insights for explaining strategic decisions and leader behaviors. *Academy of Management Review*, 30: 472–491.
- Hambrick, D. C., Humphrey, S. E., & Gupta, A. 2015. Structural interdependence within top management teams: A key moderator of upper echelons predictions. *Strategic Management Journal*, 36: 449–461.
- Hausknecht, J. P., & Trevor, C. O. 2011. Collective turnover at the group, unit, and organizational levels: Evidence, issues, and implications. *Journal of Management*, 37: 352–388.
- Heavey, A. L., Holwerda, J. A., & Hausknecht, J. P. 2013. Causes and consequences of collective turnover: A meta-analytic review. *Journal of Applied Psychology*, 98: 412–453.
- Herbert, T. T., & Estes, R. W. 1977. Improving executive decisions by formalizing dissent: The corporate devil's advocate. *Academy of Management Review*, 2: 662–667.
- Hillman, A. J., & Dalziel, T. 2003. Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review*, 28: 383–396.
- Hillman, A. J., Nicholson, G. J., & Shropshire, C. 2008. Directors' multiple role identities, identification and board monitoring and resource provision. *Organization Science*, 19: 441–456.
- Hinsz, V. B., Tindale, R. S., & Vollrath, D. A. 1997. The emerging conceptualization of groups as information processors. *Psychological Bulletin*, 121: 43–64.
- Hoppmann, J., Naegel, F., & Girod, B. 2019. Boards as a source of inertia: Examining the internal challenges and dynamics of boards of directors in times of environmental discontinuities. *Academy of Management Journal*, 62: 437–468.
- Jensen, M. C., & Meckling, W. H. 1976. Theory of firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3: 305–360.
- Joseph, J., Ocasio, W., & McDonnell, M. H. 2014. The structural elaboration of board independence: Executive power, institutional logics, and the adoption of CEO-only board structures in US corporate governance. *Academy of Management Journal*, 57: 1834–1858.
- Judge, W. Q., & Miller, A. 1991. Antecedents and outcomes of decision speed in different environmental contexts. *Academy of Management Journal*, 34: 449–463.
- Kanfer, R., & Kerry, M. 2012. Motivation in multiteam systems. In S. J. Zaccaro, M. A. Marks, & L. A. DeChurch (Eds.), *Multiteam systems: An organization form for dynamic and complex environments*: 81–108. New York, NY: Routledge.
- Karim, S., Carroll, T. N., & Long, C. P. 2016. Delaying change: Examining how industry and managerial turbulence impact structural realignment. *Academy of Management Journal*, 59: 791–817.
- Katz, D., & Kahn, R. L. 1978. *The social psychology of organizations* (2nd ed.). New York, NY: John Wiley & Sons.
- Keats, B. W., & Hitt, M. A. 1988. A causal model of linkages among environmental dimensions, macro organizational characteristics, and performance. *Academy of Management Journal*, 31: 570–598.
- Kellermanns, F. W., Floyd, S. W., Pearson, A. W., & Spencer, B. 2008. The contingent effect of constructive confrontation on the relationship between shared mental models and decision quality. *Journal of Organizational Behavior*, 29: 119–137.
- Kor, Y. Y. 2006. Direct and interaction effects of top management team and board compositions on R&D investment strategy. *Strategic Management Journal*, 27: 1081–1099.
- Kraatz, M. S., & Zajac, E. J. 2001. How organizational resources affect strategic change and performance in turbulent environments: Theory and evidence. *Organization Science*, 12: 632–657.
- Krause, R., Filatotchev, I., & Bruton, G. D. 2016. When in Rome, look like Caesar? Investigating the link between demand-side cultural power distance and CEO power. *Academy of Management Journal*, 59: 1361–1384.
- Krause, R., Withers, M. C., & Semadeni, M. 2017. Compromise on the board: Investigating the antecedents and consequences of lead independent director appointment. *Academy of Management Journal*, 60: 2239–2265.
- Lado, A. A., & Wilson, M. C. 1994. Human-resource systems and sustained competitive advantage: A competence-based perspective. *Academy of Management Review*, 19: 699–727.
- Lanaj, K., Foulk, T. A., & Hollenbeck, J. R. 2018. The benefits of not seeing eye to eye with leadership: Divergence in risk preferences impacts multiteam system behavior and performance. *Academy of Management Journal*, 61: 1554–1582.
- Lanaj, K., Hollenbeck, J. R., Ilgen, D. R., Barnes, C. M., & Harmon, S. J. 2013. The double-edged sword of decentralized planning in multiteam systems. *Academy of Management Journal*, 56: 735–757.
- Langley, M. 2015. Two activists put one CEO on the spot—Mondelez boss Rosenfeld hears often from investors Peltz and Ackman, *Wall Street Journal*, December 5

- Retrieved from <https://www.wsj.com/articles/two-activists-put-one-ceo-on-the-spot-1450230598>.
- Lavie, D., Stettner, U., & Tushman, M. L. 2010. Exploration and exploitation within and across organizations. *Academy of Management Annals*, 4: 109–155.
- Lawrence, P. R., & Lorsch, J. W. 1967. *Organization and environment*. Boston, MA: Harvard Business School Press.
- Lehmann-Willenbrock, N., Allen, J. A., & Kauffeld, S. 2013. A sequential analysis of procedural meeting communication: How teams facilitate their meetings. *Journal of Applied Communication Research*, 41: 365–388.
- LePine, J. A., Piccolo, R. F., Jackson, C. L., Mathieu, J. E., & Saul, J. R. 2008. A meta-analysis of teamwork processes: Tests of a multidimensional model and relationships with team effectiveness criteria. *Personnel Psychology*, 61: 273–307.
- Levinthal, D. A., & March, J. G. 1993. The myopia of learning. *Strategic Management Journal*, 14: 95–112.
- Lewis, K. 2003. Measuring transactive memory systems in the field: Scale development and validation. *Journal of Applied Psychology*, 88: 587–604.
- Li, J., & Tang, Y. I. 2010. CEO hubris and firm risk-taking in China: The moderating role of managerial discretion. *Academy of Management Journal*, 53: 45–68.
- Luciano, M. M., DeChurch, L. A., & Mathieu, J. E. 2018. Multiteam systems: A structural framework and meso-theory of system functioning. *Journal of Management*, 44: 1065–1096.
- Lynall, M. D., Golden, B. R., & Hillman, A. J. 2003. Board composition from adolescence to maturity: A multitheoretic view. *Academy of Management Review*, 28: 416–431.
- Lyon, D. W., & Ferrier, W. J. 2002. Enhancing performance with product-market innovation: The influence of the top management team. *Journal of Managerial Issues*, 14: 452–469.
- Ma, S. H., & Seidl, D. 2018. New CEOs and their collaborators: Divergence and convergence between the strategic leadership constellation and the top management team. *Strategic Management Journal*, 39: 606–638.
- Marks, M. A., DeChurch, L. A., Mathieu, J. E., Panzer, F. J., & Alonso, A. 2005. Teamwork in multiteam systems. *Journal of Applied Psychology*, 90: 964–971.
- Marks, M. A., Mathieu, J. E., & Zaccaro, S. J. 2001. A temporally based framework and taxonomy of team processes. *Academy of Management Review*, 26: 356–376.
- Mathieu, J. E. 2012. Reflections on the evolution of the multiteam systems concept and look to the future. In S. J. Zaccaro, M. A. Marks, & L. A. DeChurch (Eds.), *Multiteam systems: An organization form for dynamic and complex environments*: 511–544. New York, NY: Routledge.
- Mathieu, J. E., & Chen, G. 2011. The etiology of the multi-level paradigm in management research. *Journal of Management*, 37: 610–641.
- Mathieu, J. E., Hollenbeck, J. R., van Knippenberg, D., & Ilgen, D. R. 2017. A century of work teams in the *Journal of Applied Psychology*. *Journal of Applied Psychology*, 102: 452–467.
- Mathieu, J. E., Luciano, M. M., & DeChurch, L. A. 2018. Multiteam systems: The next chapter. In N. Anderson, D. Ones, H. K. Sinangil, & C. Viswesvaran (Eds.), *Handbook of industrial, work, and organizational psychology* (2nd ed.): 333–353. London, U.K.: Sage.
- Mathieu, J. E., Marks, M. A., & Zaccaro, S. J. 2001. Multiteam systems. In N. Anderson, D. Ones, H. K. Sinangil, & C. Viswesvaran (Eds.), *International handbook of work and organizational psychology*: 289–313. London, U.K.: Sage.
- McDonald, M. L., Westphal, J. D., & Graebner, M. E. 2008. What do they know? The effects of outside director acquisition experience on firm acquisition performance. *Strategic Management Journal*, 29: 1155–1177.
- McGrath, J. E., Arrow, H., & Berdahl, J. L. 1999. Cooperation and conflict as manifestations of coordination in small groups. *Polish Psychological Bulletin*, 30: 1–14.
- McNamara, G., Luce, R. A., & Thompson, G. H. 2002. Examining the effect of complexity in strategic group knowledge structures on firm performance. *Strategic Management Journal*, 23: 153–170.
- McNulty, T., Roberts, J., & Stiles, P. 2005. Undertaking governance reform and research: Further reflections on the Higgs review. *British Journal of Management*, 16: S99–S107.
- Mell, J., DeChurch, L. A., Contractor, N., & Leenders, R. 2019. Identity asymmetries: An experimental investigation of social identity and information exchange in multiteam systems. *Academy of Management Journal* doi: 10.5465/amj.2018.0325.
- Mesmer-Magnus, J. R., & DeChurch, L. A. 2009. Information sharing and team performance: A meta-analysis. *Journal of Applied Psychology*, 94: 535–546.
- Miller, C. C., Ogilvie, D., & Glick, W. H. 2006. Assessing the external environment: An enrichment of the archival tradition. In D. J. Ketchen & D. D. Bergh (Eds.), *Research methodology in strategy and management*: 97–122. Bingley, U.K.: Emerald.
- Mintzberg, H., Raisinghani, D., & Théorêt, A. 1976. The structure of “unstructured” decision processes. *Administrative Science Quarterly*, 21: 246–275.
- Mintzberg, H., & Waters, J. A. 1985. Of strategies, deliberate and emergent. *Strategic Management Journal*, 6: 257–272.
- Mochari, I. 2016. Why half of the S&P 500 companies will be replaced in the next decade. Retrieved from

- <https://www.inc.com/ilan-mochari/innosight-sp-500-new-companies.html>.
- Morais, F., Kakabadse, A., & Kakabadse, N. 2018. The chairperson and CEO roles interaction and responses to strategic tensions. *Corporate Governance*, 18: 143–164.
- Murase, T., Carter, D. R., DeChurch, L. A., & Marks, M. A. 2014. Mind the gap: The role of leadership in multi-team system collective cognition. *Leadership Quarterly*, 25: 972–986.
- Nadkarni, S., & Narayanan, V. K. 2007. The evolution of collective strategy frames in high- and low-velocity industries. *Organization Science*, 18: 688–710.
- National Research Council. 2014. Multiteam systems as the context for individuals and teams. *The context of military environments: An agenda for basic research on social and organizational factors relevant to small units*: 101–120. Washington, D.C.: The National Academies Press.
- Neville, F., Byron, K., Post, C., & Ward, A. 2019. Board independence and corporate misconduct: A cross-national meta-analysis. *Journal of Management*, 45: 2538–2569.
- Nicholson, G., Pugliese, A., & Pieter-Jan, B. 2017. Habitual accountability routines in the boardroom: How boards balance control and collaboration. *Accounting, Auditing & Accountability Journal*, 30: 222–246.
- Oehmichen, J., Schrapp, S., & Wolff, M. 2017. Who needs experts most? Board industry expertise and strategic change—A contingency perspective. *Strategic Management Journal*, 38: 645–656.
- Park, S. H., Westphal, J. D., & Stern, I. 2011. Set up for a fall: The insidious effects of flattery and opinion conformity toward corporate leaders. *Administrative Science Quarterly*, 56: 257–302.
- Parker, L. D. 2007. Boardroom strategizing in professional associations: Processual and institutional perspectives. *Journal of Management Studies*, 44: 1454–1480.
- Pathak, S., Hoskisson, R. E., & Johnson, R. A. 2014. Settling up in CEO compensation: The impact of divestiture intensity and contextual factors in refocusing firms. *Strategic Management Journal*, 35: 1124–1143.
- Pearsall, M. J., & Venkataramani, V. 2015. Overcoming asymmetric goals in teams: The interactive roles of team learning orientation and team identification. *Journal of Applied Psychology*, 100: 735–748.
- Pitcher, P., & Smith, A. D. 2001. Top management team heterogeneity: Personality, power, and proxies. *Organization Science*, 12: 1–18.
- Porck, J. P., Matta, F. K., Hollenbeck, J. R., Oh, J. K., Lanaj, K., & Lee, S. M. 2019. Social identification in multiteam systems: The role of depletion and task complexity. *Academy of Management Journal*, 62: 1137–1162.
- Porter, M. E. 1980. *Competitive strategy: Techniques for analyzing industry and competitors*. New York, NY: Harper & Row.
- Quinn, R. E., & Cameron, K. 1983. Organizational life-cycles and shifting criteria of effectiveness: Some preliminary evidence. *Management Science*, 29: 33–51.
- Raes, A. M. L., Heijltjes, M. G., Glunk, U., & Roe, R. A. 2011. The interface of the top management team and middle managers: A process model. *Academy of Management Review*, 36: 102–126.
- Ren, Y., & Argote, L. 2011. Transactive memory systems 1985–2010: An integrative framework of key dimensions, antecedents, and consequences. *Academy of Management Annals*, 5: 189–229.
- Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. 2009. Measuring organizational performance: Towards methodological best practice. *Journal of Management*, 35: 718–804.
- Rico, R., Hinsz, V. B., Davison, R. B., & Salas, E. 2018. Structural influences upon coordination and performance in multiteam systems. *Human Resource Management Review*, 28: 332–346.
- Rindova, V. P. 1999. What corporate boards have to do with strategy: A cognitive perspective. *Journal of Management Studies*, 36: 953–975.
- Roberto, M. A. 2003. The stable core and dynamic periphery in top management teams. *Management Decision*, 41: 120–131.
- Rumelt, R. P. 1991. How much does industry matter? *Strategic Management Journal*, 12: 167–185.
- Sanders, W. M. G., & Hambrick, D. C. 2007. Swinging for the fences: The effects of CEO stock options on company risk taking and performance. *Academy of Management Journal*, 50: 1055–1078.
- Schechter, A. M. 2017. *It's about time: Theorizing the antecedents and outcomes of dynamic processes in teams and multiteam systems*. Unpublished PhD Dissertation, Northwestern University.
- Scott, W. R. 2003. *Organizations: Rational, natural, and open systems* (5th ed.). Upper Saddle River, N.J.: Prentice Hall.
- Sharfman, M. P., & Dean, J. W., Jr. 1991. Conceptualizing and measuring the organizational environment: A multidimensional approach. *Journal of Management*, 17: 681–715.
- Shuffler, M. L., & Carter, D. R. 2018. Teamwork situated in multiteam systems: Key lessons learned and future opportunities. *American Psychologist*, 73: 390–406.
- Siggelkow, N., & Rivkin, J. W. 2005. Speed and search: Designing organizations for turbulence and complexity. *Organization Science*, 16: 101–122.
- Simons, T. L., & Peterson, R. S. 2000. Task conflict and relationship conflict in top management teams: The

- pivotal role of intragroup trust. *Journal of Applied Psychology*, 85: 102–111.
- Sirola, N., & Pitesa, M. 2017. Economic downturns undermine workplace helping by promoting a zero-sum construal of success. *Academy of Management Journal*, 60: 1339–1359.
- Smith, W. K., & Tushman, M. L. 2005. Managing strategic contradictions: A top management model for managing innovation streams. *Organization Science*, 16: 522–536.
- Stevens, R., Moray, N., Bruneel, J., & Clarysse, B. 2015. Attention allocation to multiple goals: The case of for-profit social enterprises. *Strategic Management Journal*, 36: 1006–1016.
- Sundaramurthy, C., & Lewis, M. 2003. Control and collaboration: Paradoxes of governance. *Academy of Management Review*, 28: 397–415.
- Sundaramurthy, C., Pukthuanthong, K., & Kor, Y. 2014. Positive and negative synergies between the CEO's and the corporate board's human and social capital: A study of biotechnology firms. *Strategic Management Journal*, 35: 845–868.
- Tuggle, C. S., Schnatterly, K., & Johnson, R. A. 2010. Attention patterns in the boardroom: How board composition and processes affect discussion of entrepreneurial issues. *Academy of Management Journal*, 53: 550–571.
- Van de Ven, A. H., & Delbecq, A. L. 1974. Task contingent model of work-unit structure. *Administrative Science Quarterly*, 19: 183–197.
- Van de Ven, A. H., Delbecq, A. L., & Koenig, R. 1976. Determinants of coordination modes within organizations. *American Sociological Review*, 41: 322–338.
- Walters, B. A., Kroll, M., & Wright, P. 2010. The impact of TMT board member control and environment on post-IPO performance. *Academy of Management Journal*, 53: 572–595.
- Weick, K. E. 1979. *The social psychology of organizing*. Reading, MA: Addison-Wesley.
- Westley, F., & Mintzberg, H. 1989. Visionary leadership and strategic management. *Strategic Management Journal*, 10(S1): 17–32.
- Westphal, J. D. 1999. Collaboration in the boardroom: Behavioral and performance consequences of CEO–board social ties. *Academy of Management Journal*, 42: 7–24.
- Wiersema, M. 2002. Holes at the top: Why CEO firings backfire. *Harvard Business Review*, 80: 70–77.
- Wong, E. M., Ormiston, M. E., & Tetlock, P. E. 2011. The effects of top management team integrative complexity and decentralized decision making on corporate social performance. *Academy of Management Journal*, 54: 1207–1228.
- Zaccaro, S. J., Marks, M. A., & DeChurch, L. A. 2012. Multiteam systems: An introduction. In S. J. Zaccaro, M. A. Marks, & L. A. DeChurch (Eds.), *Multiteam systems: An organization form for dynamic and complex environments*: 3–32. New York, NY: Routledge.
- Zhang, Y., & Rajagopalan, N. 2004. When the known devil is better than an unknown god: An empirical study of the antecedents and consequences of relay CEO successions. *Academy of Management Journal*, 47: 483–500.
- Zhao, E. Y., Fisher, G., Lounsbury, M., & Miller, D. 2017. Optimal distinctiveness: Broadening the interface between institutional theory and strategic management. *Strategic Management Journal*, 38: 93–113.
- Zuckerman, E. 2016. Optimal distinctiveness revisited. In M. G. Pratt, M. Schultz, B. E. Ashforth, & D. Ravasi (Eds.), *The Oxford handbook of organizational identity*. Oxford, U.K.: Oxford University Press.



Margaret M. Luciano (Margaret.luciano@asu.edu) is an assistant professor of management and entrepreneurship at the W. P. Carey School of Business, Arizona State University. Margaret holds a PhD in management from the University of Connecticut. Her research focuses on team dynamics, multiteam systems, and leading change—with particular emphasis on healthcare and military contexts.

Jennifer D. Nahrgang (Jennifer.Nahrgang@asu.edu) is a professor of management and entrepreneurship at the W. P. Carey School of Business, Arizona State University. Jennifer holds a PhD in organizational behavior from Michigan State University. Her research focuses on leadership processes and development, team dynamics and effectiveness, employee voice and engagement, and the future world of work.

Christine Shropshire (Shropshire@asu.edu) is an associate professor of management and entrepreneurship at the W. P. Carey School of Business, Arizona State University. Christine holds a PhD in management from Arizona State University. Her research focuses on corporate governance, including board composition and effectiveness, diversity in the upper echelons, and stakeholder management.



Copyright of Academy of Management Review is the property of Academy of Management and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.