

RESEARCH NOTES AND COMMENTARIES

DYNAMIC MANAGERIAL CAPABILITIES: CONFIGURATION AND ORCHESTRATION OF TOP EXECUTIVES' CAPABILITIES AND THE FIRM'S DOMINANT LOGIC

YASEMIN Y. KOR* and ANDREA MESKO

Darla Moore School of Business, University of South Carolina, Columbia, South Carolina, U.S.A.

This paper contributes to the understanding of the executive team dynamic managerial capabilities by developing theory about the interplay between the firm's dominant logic and dynamic managerial capabilities (including managerial human capital, social capital, and cognition). We underscore the criticality of the two key CEO-level functions: configuration and orchestration of senior executive team dynamic capabilities. We develop theory on how these functions create and sculpt the management team's absorptive capacity, which in turn shapes the team's adaptive capacity. We present theory about the distributed nature of efforts for organizational renewal where CEO's dynamic managerial capabilities in concerto with senior executive managerial capabilities will drive top management's ability to revitalize the firm's dominant logic and to achieve evolutionary fit. Copyright © 2012 John Wiley & Sons, Ltd.

INTRODUCTION

Research on dynamic capabilities underscores the importance of firms' adaptation to changing environmental conditions through integration, building, and reconfiguration of firms' resources and capabilities (Teece, 2007; Teece, Pisano, and Shuen, 1997). Dynamic capabilities refer to the capacity of an organization to purposefully extend, create, or modify its resource base, enabling the firm to achieve evolutionary fitness through adaptation to

and/or shaping of the external environment (Helfat *et al.*, 2007). This line of research highlights the importance of *dynamic managerial capabilities* as the key mechanism to achieve congruence between the firm's competencies and changing environmental conditions (Adner and Helfat, 2003; Bergen and Peteraf, 2002; Sirmon and Hitt, 2009). Managers serve in this role by redefining the growth and opportunity boundaries of a firm and by redesigning its competitive positioning in changing environments (Castanias and Helfat, 1991; Mahoney, 1995; Penrose, 1959). In this process, managers utilize environmental scanning to identify new trends and opportunities, and integrate new ideas and knowledge with the firm's existing capabilities, which is instrumental for success in product

Keywords: dynamic capabilities; chief executive officer; top management teams; human capital; social capital

*Correspondence to: Yasemin Y. Kor, Darla Moore School of Business, University of South Carolina, 1705 College Street, Columbia, SC 29208, U.S.A. E-mail: ykor@moore.sc.edu

sequencing (Helfat and Raubitschek, 2000; Iansiti and Clark, 1994). By identifying new technologies, product applications, and competency combinations, managers act as agents of change (Tripsas and Gavetti, 2000).

While dynamic capabilities research has been a fertile ground in producing insights on strategic renewal and dynamic fit, we have limited understanding when it comes to *how* managerial capabilities produce changes in the firm's configuration of resources and competencies (Priem and Butler, 2001; Sirmon, Hitt, and Ireland, 2007; Sirmon and Hitt, 2009). Creating new competitive advantages are highly desirable; however, there are countless ways and directions in which a firm can innovate and revitalize itself (Teece, 2007). In our current definitions, dynamic managerial capabilities make things happen, but they fail to capture how the firm's set of managerial capabilities drive and are influenced by the unique configuration of resources and competencies in the firm. Thus, an in-depth understanding of dynamic managerial capabilities requires new insight about (1) how dynamic managerial capabilities *themselves* are configured and orchestrated and (2) how executives' capabilities result in (re)configuration of a firm's resources and capabilities.

In addressing these questions, we build on Prahalad and Bettis's (1986) powerful concept of the firm's *dominant logic*. We argue that dominant logic is the missing link between the senior executive team's capabilities and renewal of the firm's resources and competencies. We first develop a theoretical framework to link the key attributes underpinning dynamic managerial capabilities (i.e., managerial human capital, social capital, and cognition) (Adner and Helfat, 2003) to top-level managers' dominant logic and the overall dominant logic in the firm (Prahalad and Bettis, 1986). Second, we unpack the concept of dynamic managerial capabilities by considering the *configuration* of these capabilities and the contributions of the chief executive officer (CEO) in building *top management team absorptive capacity*. We elaborate on the CEO's *orchestration* of senior executive team dynamics and how these efforts can be conducive to managerial learning and adaptation. Third, we present theory about how executive team configuration and orchestration efforts produce *feedback effects* on managers' collective ability to revitalize a firm's dominant

logic. By studying the process through which the CEO shapes the management team absorptive capacity, we aim to contribute to the understanding of the microfoundations of dynamic capabilities (Teece, 2007). In developing our theoretical framework, we assume intentionality and purposeful choices made by managers (Barnard, 1938; Penrose, 1959).

MANAGERIAL CAPABILITIES AND DOMINANT LOGIC

Adner and Helfat (2003: 1012) define dynamic managerial capabilities as 'the capabilities with which managers build, integrate, and reconfigure organizational resources and competencies.' They insightfully identify the three attributes underpinning dynamic managerial capabilities as (1) managerial human capital, (2) managerial social capital, and (3) managerial cognition. *Managerial human capital* includes the skills and knowledge repertoire of managers, which are shaped by their education and personal and professional experiences (Becker, 1993; Castanias and Helfat, 2001). Managerial experiences in specific contexts (e.g., industry, technology regime, and geographical location) allow managers to acquire and develop specialized knowledge and skills (Harris and Helfat, 1997; Kor, 2003). *Managerial social capital* involves managers' ability to access resources through relationships and connections (Adler and Kwon, 2002). Managers' formal and informal network ties help acquire essential resources and provide them with critical information for decision making (Gelatkanycz and Hambrick, 1997). Managers' human capital and social capital are linked because the information and knowledge that managers gain through various relationships can be crucial in building and renewing their human capital (Coleman, 1988). Further, dynamic managerial capabilities are driven by *managerial cognition*, which consists of the belief systems and mental models that managers use for decision making (Prahalad and Bettis, 1986). Managerial cognition is shaped by personal and professional experiences and managers' interactions in internal and external networks (Adner and Helfat, 2003). All three elements of dynamic managerial capabilities—human capital, social capital, and cognition—are intertwined.

In this paper, we submit that the three elements of dynamic managerial capabilities are also vitally linked to the notion of *managerial dominant logic* such that they are the key inputs in shaping this logic. Managers' dominant logic refers to 'the way in which managers conceptualize the business and make critical resource allocation decisions—be it in technologies, product development, distribution, advertising, or in human resource management' (Prahalad and Bettis, 1986: 490). This logic represents management's view of the world, where the firm stands in its business environment, and what it ought to be doing. Dominant logic is an articulation of the fundamental strategic beliefs, assumptions, and intentions of the CEO and senior management (Lampel and Shamsie, 2000).

The three elements of managerial capabilities are foundational to the managers' dominant logic. First, managerial cognition plays a key role in shaping managers' beliefs and assumptions about a *particular* firm. Managerial cognition involves schemas and mental models that include a system of theories and propositions (Huff, 1982; Prahalad and Bettis, 1986) that managers use to see their way through a bewildering flow of information to make decisions (Walsh, 1995). Based on previous experiments, accomplishments, and failures, managers develop these cognitive lenses through which they perceive and interpret the world. Managers' dominant logic for a firm is created as founders and managers, more specifically their cognitive models, *interact with* a particular business and firm environment, which yields assumptions and expectations for this firm context. Thus, managers' dominant logic for a firm is the product of *application of* managerial mental models (along with their human and social capital) in a particular business context.¹

Second, *managerial human capital* plays a key role in shaping managers' dominant logic for a firm. Based on prior experience with certain resource bundles and strategies, managerial human capital becomes partly idiosyncratic, reflecting specificity with respect to resource deployment, development, acquisition, and combinations (Kor

and Leblebici, 2005). The knowledge of specialized resource strategies and their *corresponding managerial skill set* then *shape* the key assumptions and heuristics that managers use to perceive, interpret, and evaluate a particular business environment. This human capital-based managerial processing of internal and external stimuli is then converted into strategic priorities and choices about paths and patterns of firm growth and diversification, competitive positioning, and capability acquisition and development initiatives.

Third, managerial social capital is instrumental to managers' dominant logic for a firm. Interactions with close network members (e.g., colleagues, mentors, and friends,) impact how managers perceive and interpret information about the external environment and evaluate what is achievable by the firm. In the presence of the overwhelming amount of information managers often receive (Walsh, 1995), conversations with confidant colleagues and friends within and outside the firm help managers decide which stimuli to focus on, what additional information to collect, and how to process data in an efficient and coherent manner (Mintzberg, 2009). Thus, by providing knowledge, heuristics, and interpretive lenses, managers' networks influence the beliefs and expectations managers develop for a firm (Coleman, 1988; Nahapiet and Ghoshal, 1998). In combination, these three elements of dynamic managerial capabilities operate as an interactive system in the development of managerial dominant logic for a particular firm.

Proposition 1: All three elements of dynamic managerial capabilities—managerial human capital, social capital, and cognition—are strongly linked and foundational to the development of managers' dominant logic for a particular firm. This logic is constructed when the three elements are deployed in processing and interpreting the stimuli and information specific to a firm and its environment.

At the initiation of the firm, its dominant logic is very much a reflection of managerial dominant logic. Over time, as managers implement and interact with the dominant logic and make decisions based on its underlying assumptions and expectations, this managerial logic expands in its meaning and scale (von Krogh and Roos, 1996). Dominant logic evolves to be an organizational-level phenomenon as a system of expectations, beliefs,

¹ Despite the strong link between managerial cognition and managerial dominant logic, these are separate concepts. Managerial cognition represents the broader set of schemas and mental models of managers, whereas managerial dominant logic for a specific firm is what is generated *after* the system of managerial human capital, social capital, and cognition is deployed in *processing and interpreting* the information *specific to* a firm and its environment.

and priorities that are embedded in the firm's routines, procedures, and resource commitments. The knowledge and reasoning that support the assumptions and priorities embedded in a dominant logic are recorded in organizational memory through formal routines and informally shared understandings (Ouchi, 1980). This recording reflects an order in the resulting knowledge structure but it still allows some ambiguities and interpretive variations (Levitt and March, 1988). Thus, over time, dominant logic extends beyond the managerial level. An established dominant logic exhibits *firm-level properties and procedures* that inform and influence organizational participants in pursuing their productive efforts and initiatives (Cyert and March, 1963; Lampel and Shamsie, 2000).

Further, an established dominant logic works as a firm-level information filter screening out unneeded and unwanted information (Bettis and Prahalad, 1995). This information filter helps to economize on the time and attention of management and employees by channeling their attention and efforts to the implementation of the dominant logic. The filter functions to scan and retain appropriate data, so that decision makers can concentrate on the 'relevant' information input. Thus, the filtering system helps to efficiently deploy the cognitive resources of managers and enables them to resolve the ambiguities they encounter (Weick, 1995). With this guidance, the corporate entity can achieve a higher-order consistency in how different business units approach decisions in a multidivisional firm, and in the managerial pursuit of the strategic intent in a single business firm (Lampel and Shamsie, 2000). We illustrate these relationships in Figure 1.

Proposition 2: Over time managerial dominant logic expands in its scale and meaning and becomes embedded in a firm's routines, procedures, and resource commitments. An established dominant logic, with its underlying assumptions, priorities, and belief systems, serves as an organizational-level information and competency filter and guides both managerial and employee actions and initiatives in configuring a firm's resources and competencies.

Thus, we emphasize here that dominant logic influences a firm's resource and competency configuration (1) by serving as an information filter (Bettis and Prahalad, 1995), and (2) by creating a competency filter. As the initial resource deployment decisions in the firm are shaped by managers' dominant logic, a *resource and capability infrastructure* emerges, featuring particular resource combinations and co-specialized capabilities (Teece, 1986; Tripsas, 1997). This infrastructure not only reflects commitment, priorities, and the strategic intent of managers (Ghemawat, 1991) but also involves an underlying network of routines, procedures, and knowledge systems that feed ongoing capability development efforts (Nelson and Winter, 1982). A firm's resource and capability endowment influences the search efforts for growth, diversification, and strategic experimentation, which then ignite the changes in the configuration of the firm's resources and competencies to fulfill new ambitions (Penrose, 1959). Therefore, a firm's organization-wide search and experimentation efforts are subject to path-dependencies created by the capability stocks and information flows that are (at least partly) *intertwined* with the firm's dominant logic.

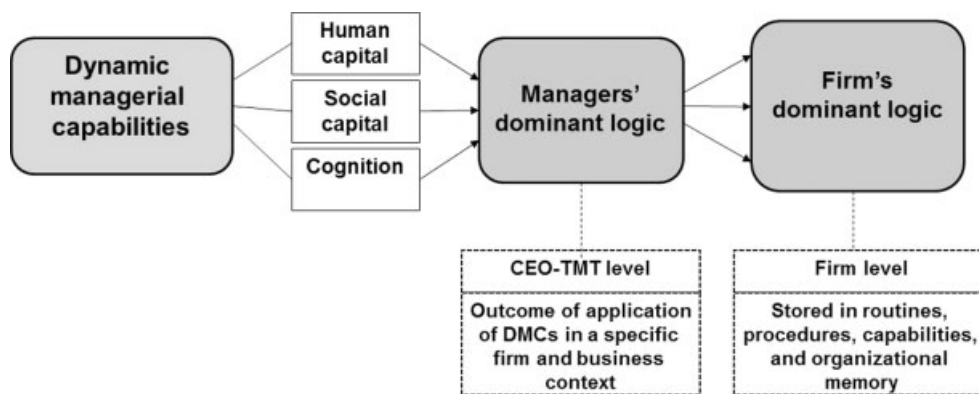


Figure 1. Managerial capabilities and the emergence of firm's dominant logic

This line of reasoning also suggests that an established dominant logic can serve as a stabilizing force in strategy implementation and even influence the search for new directions of growth and innovation. This bears a critical question. What will then be the source of change and strategic renewal in firms with an established dominant logic? Exogenous factors such as change in technology, deregulation, and competition can invoke a change in the firm's strategy (Gimeno and Woo, 1996). However, these events are still subject to interpretation by the managers. An exogenous change can have different meanings and consequences for each firm due to unique resource and activity configurations within firms (Siggelkow, 2002) and due to the subjectivism in managerial perceptions, expectations, and preferences, resulting in firm-level heterogeneity in responses to events and shifts in the environment (Kor, Mahoney, and Michael, 2007). Here differences in managerial alertness, responsiveness, and learning as part of the *top management team absorptive capacity* shape the firm's reaction to new internal and external information (Boulding, 1956; Cohen and Levinthal, 1990). We define top management team absorptive capacity as the collective capacity of managers to absorb new knowledge and combine their existing knowledge repositories with new insights, assumptions, and knowledge systems. Such combinations yield fresh managerial perceptions and realizations about the future possibility set for the firm and the need for adjustments in the firm's competency portfolio. Next, we give attention to these *dynamic properties* of managerial capabilities.

TWO CRITICAL FUNCTIONS OF THE CEO: CONFIGURATION AND ORCHESTRATION

The absorptive capacity of the management team can be grown and modified in two ways: (1) through reconfiguration of the executive team dynamic capabilities, and (2) through continued learning by the existing senior-level executives. We consider each path in turn. Regarding the first path, *configuring* senior executive competencies directly shapes the absorptive capacity of the management team. This vital function of the

CEO involves identifying, recruiting, and bringing together the relevant bundle of specialized and general managerial skills, and considering the trade-offs among them. In assembling the executive team dynamic capabilities, the CEO has to consider the firm's current strategy and its specialized needs for managerial skills, network access, and the experiential knowledge of certain competitive environments (Harris and Helfat, 1997; Sirmon and Hitt, 2009). For example, in a particular firm, the knowledge of forming and managing research and development alliances can have utmost importance in terms of managerial human capital, whereas in another firm, an expertise in building infrastructure and systems that support fast-growing franchising networks can be the key managerial asset. Even though managers in both firms have valuable human capital, they cannot substitute for one another due to the *specialized* nature of their capabilities (Helfat and Peteraf, 2003; Kor, 2003). Likewise, returns to investments in executive (and other) human capital are likely to vary based on the resource deployment environment contingencies, such as the firm's strategy domain attributes and competitors' resource practices (Sirmon and Hitt, 2009).

Managers also frequently utilize *generic skills* such as organizing, team building, networking, and collaborating (Mintzberg, 2009: 91). Entrepreneurial skills such as alertness, sensing new opportunities, scanning and interpreting information, and constructing new business models can also be included in this generic category (Teece, 2007) and are crucial to the sustaining of a firm's dynamic capabilities (Helfat *et al.*, 2007). Generic skills are transferable from one firm to another, and are crucial for the *process* of management and in pursuing new business initiatives. These skills are partly driven by managers' innate analytical, cognitive, and creative abilities, and are also learned through years of experience and reflecting (as part of the craft of managing) (Mintzberg, 2009). However, despite their value and applicability in multiple settings, generic skills are not a substitute for specialized skills. Therefore, in configuring the senior management dynamic capability set, a major challenge for the CEO is to achieve a *dynamic alignment* between the firm's dominant logic and the essential bundle of generic and specialized managerial capabilities.

During the process of *recruiting and combining* different types of managerial capital and mental models, the CEO uses ingenuity and personal judgment in evaluating the current dominant logic and anticipating changes to it. Anticipation of continued viability of the current dominant logic may encourage the CEO to build a senior executive team that is *tightly coupled* with the requirements of that logic, because tight coupling maximizes implementation success. If anticipating and envisioning a *shift* in the dominant logic, on the other hand, a CEO is likely to alter the competency profile of the executive team and start acquiring managerial capabilities for the next stage of firm growth and change (Cho and Hambrick, 2006). Alternatively, a CEO may anticipate changes to the current logic, but still face substantial uncertainties about the timing and nature of the shifts. In that case, when recruiting and promoting, the CEO may emphasize generic human capital over specialized human capital, since generic skills can be leveraged more effectively for different types of strategic shifts and repositioning. These CEO judgments about (1) how to achieve a balance between generic and specialized management capital, and (2) the tight versus loose coupling of management capabilities with the firm's dominant logic are likely to have a significant impact on the executive team absorptive capacity. Managerial absorptive capacity tailored to a specific strategy domain can be highly effective in a particular decision system and strategic context (Sirmon and Hitt, 2009). Indeed, this knowledge and expertise endowment may allow for *speedy knowledge acquisition* in the neighboring knowledge domains and increase the depth of expertise in the current knowledge domain (Cohen and Levinthal, 1990), thereby yielding even more specialized managerial competence. This could be a virtuous circle in some environments, but could also grow into a vicious cycle or competency trap if the environment changes or the firm enters new markets (Levitt and March, 1988). A highly idiosyncratic absorptive capacity may not facilitate (and may even block) managerial learning when the firm is faced with unexpected challenges, shifts, and new strategic contexts. Thus, the choices regarding building the executive team absorptive capacity have vital implications on the firm's evolutionary fit, and these choices are intertwined with the CEO's vision about the future viability of dominant logic.

Proposition 3a: The CEO plays the lead role in (re)configuring dynamic managerial capabilities within the senior executive team. Recruiting, promoting, and combining various types of managerial capabilities involves the interpretation of the existing dominant logic and anticipating changes to it.

Proposition 3b: Configuration function of the CEO requires delicate balancing of specialized and generic management skills, and deciding how tightly (or loosely) to align executive managerial capabilities with the firm's dominant logic. These decisions determine the level of specificity of the management team's absorptive capacity, which in turn drives the team's adaptive capacity.

Besides the executive team configuration, absorptive capacity of the management team can also be grown through continued learning by the existing senior executives. This expansion in the dynamic properties of managerial capabilities is affected by the second key function of the CEO—the *orchestration of the team dynamics*. Teece (2007: 1335–1336) describes the similarities between top executive functions and those of an orchestra conductor. Similar to a conductor, a CEO in the business context has the critical job of continuous *orchestration* of firm's assets to promote complementarities and productive exchanges in the firm. Utilizing this analogy, we focus on a CEO's *orchestration of the senior executive team* that deals with the CEO's ability to facilitate individual and team efforts.

In an orchestra, even world-class musicians may not suffice for the orchestra to excel in performance. A conductor helps to induce and integrate harmonious and synchronized performances of individual musicians and energizes the musicians to perform at their best. Similarly, while executives have their individual talent and absorptive capacities, the top management team's absorptive capacity is more than a collection (or aggregation) of individual absorptive capacities of executives. Management team absorptive capacity entails the collective capacity of managers to learn from each other (and from other sources) as a result of the exchanges, interactions, and collaborations among team members. Without effective team dynamics and orchestration, management team absorptive capacity is reduced to a set of

atomistic individual absorptive capacities that are deployed in isolation from one another. Emergence of a team absorptive capacity requires managerial interactions and *co-deployment* of executives' dynamic capabilities. The strength of management team absorptive capacity lies on the productive and synergistic nature of these interactions. A strong absorptive capacity yields superior joint decision outcomes and enhanced individual capacities.

In this process, the CEO plays a key role in establishing and strengthening a team culture where ideas, perspectives, and beliefs are shared, discussed, and negotiated (Mintzberg, 2009). In effective executive teams, members recognize each other's abilities and are willing to mutually learn and adjust. These teams show a high level and sophistication of common knowledge, language, and shared meaning (Arrow, 1974), which enable them to *integrate* unique insights and specialized knowledge bases (Grant, 1996). A well-nourished and conditioned executive team absorptive capacity is a precursor to the ability of the team to learn continuously and be open to new possibilities. Without social learning and integration mechanisms that enable managers to combine contrasting knowledge streams and capabilities (Benner and Tushman, 2003; Kogut and Zander, 1992), the executive team's absorptive capacity will be lacking in knowledge utilization capabilities (such as knowledge transformation, acquisition, assimilation, and exploitation) (Zahra and George, 2002).

Thus, the CEO's ability to mentor, teach, counsel, and nurture senior managers both helps executives flourish as individual managers, and promotes a fruitful and synergistic co-deployment of managerial capabilities. This collaborative approach involves a positive team environment that nurtures synergy, interactive learning, and debating, along with a shared sense of respect and support for team members (Foss *et al.*, 2008). This environment fosters collective social capital among managers, which then feeds and grows the team's intellectual capital (Naphiet and Ghoshal, 1998).

Effective orchestration of the senior executive team also involves *anticipating, preempting, recognizing, and resolving team process issues*. These issues may include (collective) decision making biases or interpersonal conflicts that may distract team members from strategic issues (Eisenhardt

and Schoonhoven, 1990). As the orchestra conductor, a CEO can utilize techniques that minimize group decision making biases and make use of social processes and tools to resolve conflicts. Effective orchestrators forestall unproductive power concentrations within the team, and promote dialectic inquiry and debating processes (Walsh and Fahey, 1986). By supporting a team climate that demands, rewards, and nurtures exchange of ideas and team-based innovation, an effective orchestrator promotes a strong management team absorptive capacity.

Proposition 3c: The CEO's ability to orchestrate the senior executive team by fostering a positive team environment and coaching of executive team efforts will enhance the executive team's absorptive capacity, and cultivate the team's ability to combine specialized knowledge streams and contrasting insights, ideas, and knowledge streams.

FEEDBACK EFFECTS AND REVITALIZATION OF DOMINANT LOGIC

Effective configuration and orchestration of executive dynamic managerial capabilities will come to bear fruit in supplementing and reinforcing the *CEO's own dynamic managerial capabilities*. Even those CEOs with the most extraordinary talent, intuition, and entrepreneurial judgment are likely to benefit from a team approach to strategic decision making. Yet, the product of this effort will be as good as the overall quality and versatility of the CEO's internal and external brain trust, especially the senior-level executives (Virany, Tushman, and Romanelli, 1992). The choices and trade-offs a CEO makes in configuring the bundle of senior executive capabilities later shape the direction, versatility, and novelty of the inputs received from them. CEOs who surround themselves with cognitively diverse confidants and colleagues will have access to rich and pluralistic perceptions and interpretive lenses. The CEO's cultivation of a team environment that promotes sharing of different ideas, insights, and viewpoints will open and maintain a channel of communication that feeds critical information to

the CEO, embellishing his or her dynamic managerial capabilities.²

Proposition 4: Effective configuration and orchestration of the senior executive team dynamic managerial capabilities will reinforce and bolster the CEO's own dynamic managerial capabilities.

The CEO's use of processes to invite and incorporate creative and cognitive inputs of key informants such as senior executives (along with middle and lower-level managers, frontline employees, and board members) can make organizational renewal a more *distributed* phenomenon.³ While dominant logic may be pre-given or predefined at a point in time (von Krogh and Roos, 1996), it can assume adaptive and emergent qualities when (and if) managers perceive that assumptions of the dominant logic are no longer valid (Bettis and Prahalad, 1995). We argue that the CEO's dynamic managerial capabilities *in concerto* with the senior executive capabilities will drive their ability to recognize the need to revitalize the dominant logic. These *feedback effects* of managerial capabilities on firm's dominant logic suggest that a firm's ability to achieve evolutionary fit is closely linked to the (1) ever evolving, intricate architecture of (specialized and generic) elements of dynamic managerial capabilities, and (2) the level (degree) of internal fit between the firm's dominant logic and managerial capabilities.

Accumulation of highly specialized managerial skills, expertise, and social capital can lead to enhanced knowledge absorption in a particular knowledge domain, but it can also weaken

managers' ability to recognize and utilize unfamiliar knowledge. Generic managerial skills such as entrepreneurial skills (e.g., alertness, sensing new opportunities), team building, collaborating, and networking skills (Harris and Helfat, 1997; Mintzberg, 2009; Teece, 2007) tend to be more applicable in multiple business settings, and they facilitate the absorption of new knowledge. Yet because both specialized and generic managerial skills can be vital, CEOs have to consider the trade-offs and try to create a proper balance of these skills in the management team. This balance depends on contingencies such as anticipation of strategic change, the availability of managerial talent in (internal and external) executive markets, and the firm's ability to acquire and combine these managerial capabilities. Market- and technology-based uncertainties, talent shortage in executive markets, internal political dynamics, and the lack of resources in the firm can constrict the ability of the CEO to make adjustments in the team and achieve an appropriate repertoire of skills and competencies.⁴

Likewise, CEOs make critical choices in devising the appropriate level of fit between the firm's dominant logic and managerial capabilities. A tight coupling of dynamic managerial capabilities with the firm's dominant logic can create cognitive and skill-based *impediments* to executives' perception, willingness, and ability to revise the dominant logic. Since senior-level management makes up a crucial portion of the CEO's readily available brain trust, such rigidities will also hinder the ability of the CEO to foresee the need for and pursue modifications in the current system of assumptions, beliefs, and priorities. CEOs may be able to mitigate these rigidities (Leonard-Barton, 1992) in part with effective executive team orchestration that encourages forward thinking, open debates, dialectic inquiry, and managerial learning. Thus, these decisions concerning configuration and orchestration of executive capabilities shape the strength and versatility of the management team's absorptive capacity. As an interactive system, the CEO

² CEOs differ in their openness to divergent views and unfamiliar thoughts, and thereby, in their willingness to surround themselves with outspoken executives who have diverse skills and expertise. This underscores the importance of the CEO's personality, experience repertoire, and mental model (Kisfalvi and Pitcher, 2003; Pitcher and Smith, 2001). We thank Anne Smith for this insight.

³ A CEO can bolster top management absorptive capacity by regularly seeking input from a 'dynamic periphery' of managers who can inject the team with needed expertise, ideas, and perspectives (Roberto, 2003). This dynamic periphery continuously enriches and expands the knowledge base and idea spectrum of both the CEO and the 'stable core' of executives. Likewise, the CEO may ratify changes to lower down in the organization, which highlights the role of lower-level managers and key employees in making adjustments to the configuration of a firm's resources and competencies. We thank Associate Editor Connie Helfat and Anne Smith for these insights.

⁴ Moreover, a radical shift in the environment may call for a complete overhaul of upper management including a CEO change (Finkelstein, Hambrick, and Cannella, 2009). Firms that match the dramatically changed environment with a new CEO with appropriate credentials exhibit superior performance (Datta and Rajagopalan, 1998).

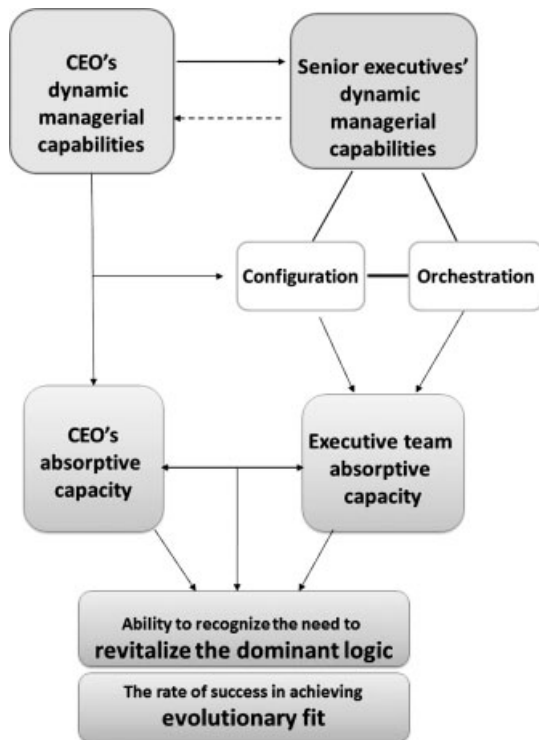


Figure 2. Managerial capabilities, CEO-executive team absorptive capacity, and revitalization of the dominant logic

and senior executive dynamic management capabilities drive managers' collective ability to *recognize the need for revitalization of the firm's dominant logic*, and the rate of success in renewing the dominant logic. We illustrate these relationships in Figure 2.

Proposition 5: The CEO's dynamic managerial capabilities in concerto with senior executive dynamic managerial capabilities will shape their collective ability to recognize the need for revitalization of the firm's dominant logic. Management teams with a strong team absorptive capacity will have a better rate of success in revising the dominant logic to achieve evolutionary fit.

DISCUSSION

Our paper contributes to the literatures on dynamic capabilities and managerial competencies in three ways. First, it connects dynamic capabilities litera-

ture (specifically research on dynamic managerial capabilities) with the notion of firm's dominant logic. In establishing this link, we develop theory about how the underlying elements of dynamic managerial capabilities (managerial cognition, human capital, and social capital) give rise to managers' dominant logic, which in turn is linked to the firm's dominant logic. Second, we develop theory on how the executive configuration function creates and sculpts the management team's absorptive capacity, which then shapes the team's adaptive capacity. CEOs also influence the team's absorptive capacity through executive team orchestration, which involves managing complementarities within the team and cultivating productive team efforts. Third, we provide theory on how these two key CEO functions—configuration and orchestration of senior executive dynamic capabilities—produce feedback effects and bolster a CEO's own dynamic managerial capabilities. Within a dynamic capabilities framework, these feedback effects complete a full circle of the interplay between dynamic managerial capabilities and the firm's dominant logic.

The research insights in this paper underscore the need for a more sophisticated typology of managerial human and social capital that identifies a large spectrum of specialized types of skills and experiences (Harris and Helfat, 1997; Kor, 2003), as well as generic managerial skills. An intuitive understanding of managerial capabilities requires a sophisticated *system* of recognizing, measuring, and evaluating specific elements of managerial human capital, social capital, and cognition. To achieve this, we may consider the virtues of going beyond a demographics-based understanding of executive human capital to a skill-based, experience-based, relationship-based, and cognition- and value-based understanding of executive-team capital (Bailey and Helfat, 2003; Priem, Lyon, and Dess, 1999). Likewise, as shown by Sirmon and Hitt (2009) and Kor and Leblebici (2005), we may benefit from efforts to identify and understand the *complex interdependencies* between the firm's choices in business and competitive strategy and its choices about managerial resource development and deployment practices and investments. It is these multilevel asset-strategy interdependencies that are at the hearth of a firm's ability to achieve internal fit, external fit, and evolutionary fit. As such, asset interconnectedness (Cool and Dierickx, 1989) and asset-strategy

interconnectedness are central to the dynamic tensions among a firm's internal fit, external fit, and evolutionary fit.

Further, we encourage future research that sheds light on coevolution of dynamic managerial capabilities and the firm's dominant logic. A range of internal and external factors (e.g., new business opportunities, competitive pressures, and governance issues) can act as triggers or moderators in the coevolution of executive team configuration and dominant logic, and there is much research to be done to discover how an unexpected critical event or a series of events can cause shifts in the belief and knowledge systems of executives (Lampel, Shamsie, and Shapira, 2009). A leap forward in dynamic capabilities research hinges on an intuitive understanding of how managers, *individually* and *as a team*, perceive, process, and interpret new stimuli and information and *respond* to them.

In conclusion, this paper highlights the criticality of connecting and codeveloping our theories about dynamic managerial capabilities and dominant logic. We look forward to future research that further unpacks and advances these insights and propositions.

ACKNOWLEDGEMENTS

We thank and honor Rich Bettis and C.K. Prahalad for their inspirational research on dominant logic. We also thank Connie Helfat and the two anonymous reviewers for their insightful comments and suggestions. Finally, we are grateful to Joe Lampel, Joe Mahoney, Richard Priem, Jamal Shamsie, Anne Smith, Henk Volberda, Ron Sebeczek, and EGOS 2009 Colloquium session participants for their valuable comments on a draft of this paper. The usual disclaimer applies.

REFERENCES

- Adler PS, Kwon S. 2002. Social capital: prospects for a new concept. *Academy of Management Review* **27**(1): 17–40.
- Adner R, Helfat CE. 2003. Corporate effects and dynamic managerial capabilities. *Strategic Management Journal*, October Special Issue **24**: 1011–1025.
- Arrow KJ. 1974. *The Limits of Organization*. W. W. Norton: New York.
- Bailey EE, Helfat CE. 2003. External management succession, human capital, and firm performance:

- an integrative analysis. *Managerial and Decision Economics* **24**: 347–369.
- Barnard CI. 1938. *The Functions of the Executive*. Harvard University Press: Cambridge, MA.
- Becker GS. 1993. *Human Capital*. University of Chicago Press: Chicago, IL.
- Benner MJ, Tushman ML. 2003. Exploitation, exploration, and process management: the productivity dilemma revisited. *Academy of Management Review* **28**(2): 238–256.
- Bergen M, Peteraf MA. 2002. Competitor identification and competitor analysis: a broad-based managerial approach. *Managerial and Decision Economics* **23**: 157–169.
- Bettis RA, Prahalad CK. 1995. The dominant logic: retrospective and extension. *Strategic Management Journal* **16**(1): 5–14.
- Boulding KE. 1956. *The Image*. University of Michigan Press: Ann Arbor, MI.
- Castanias RP, Helfat CE. 1991. Managerial resources and rents. *Journal of Management* **17**(1): 155–171.
- Castanias RP, Helfat CE. 2001. The managerial rents model: theory and empirical analysis. *Journal of Management* **27**: 661–678.
- Cho TS, Hambrick DC. 2006. Attention patterns as mediators between top management team characteristics and strategic change: the case of airline deregulation. *Organization Science* **17**(4): 453–469.
- Cohen WM, Levinthal DA. 1990. Absorptive capacity: a new perspective on learning and innovation. *Administrative Science Quarterly* **35**(1): 128–152.
- Coleman JS. 1988. Social capital in the creation of human capital. *American Journal of Sociology* **94**: s95–s120.
- Cyert R, March J. 1963. *Behavioral Theory of the Firm*. Harvard University Press: Cambridge, MA.
- Datta DK, Rajagopalan N. 1998. Industry structure and CEO characteristics: an empirical study of succession events. *Strategic Management Journal* **19**(9): 833–852.
- Dierickx I, Cool K. 1989. Assets stock accumulation and sustainability of competitive advantage. *Management Science* **35**(12): 1504–1511.
- Eisenhardt KM, Schoonhoven CB. 1990. Organizational growth: linking founding team, strategy, and growth among U.S. semi-conductor ventures, 1978–1988. *Administrative Science Quarterly* **35**: 504–529.
- Finkelstein S, Hambrick DC, Cannella AA. 2009. *Strategic Leadership: Theory and Research on Executives, Top Management Teams, and Boards*. Oxford University Press: New York.
- Foss NJ, Klein PG, Kor YY, Mahoney JT. 2008. Entrepreneurship, subjectivism, and the resource-based view: toward a new synthesis. *Strategic Entrepreneurship Journal* **2**(1): 73–94.
- Gelatkanycz MA, Hambrick DC. 1997. The external ties of top executives: implications for strategic choice and performance. *Administrative Science Quarterly* **42**: 654–681.
- Ghemawat P. 1991. *Commitment: The Dynamic of Strategy*. Free Press: New York.

- Gimeno J, Woo CY. 1996. Hypercompetition in a multimarket environment: the role of strategic similarity and multimarket contract in competitive de-escalation. *Organization Science* 7(3): 322–341.
- Grant RM. 1996. Toward a knowledge-based theory of the firm. *Strategic Management Journal*, Winter Special Issue 17: 109–122.
- Harris D, Helfat CE. 1997. Specificity of CEO human capital and compensation. *Strategic Management Journal* 18(11): 895–920.
- Helfat CE, Finkelstein S, Mitchell W, Peteraf MA, Singh H, Teece DJ, Winter SG. 2007. *Dynamic Capabilities: Understanding Strategic Change in Organizations*. Blackwell: Oxford, UK.
- Helfat CE, Peteraf MA. 2003. The dynamic resource-based view: capability lifecycles. *Strategic Management Journal*, October Special Issue 24: 997–1010.
- Helfat CE, Raubitschek RS. 2000. Product sequencing: co-evolution of knowledge, capabilities and products. *Strategic Management Journal*, October–November Special Issue 21: 961–979.
- Huff AS. 1982. Industry influences on strategy formulation. *Strategic Management Journal* 3(2): 119–131.
- Iansiti M, Clark KB. 1994. Integration and dynamic capability: evidence from development in automobiles and mainframe computers. *Industrial and Corporate Change* 3: 557–605.
- Kisfalvi V, Pitcher P. 2003. Doing what feels right: the influence of CEO character and emotions on top management team dynamics. *Journal of Management Inquiry* 12: 42–66.
- Kogut B, Zander U. 1992. Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization Science* 3(3): 383–396.
- Kor YY. 2003. Experience-based top management team competence and sustained growth. *Organization Science* 14(6): 707–719.
- Kor YY, Leblebici H. 2005. How do interdependencies among human-capital deployment, development, and diversification strategies affect firms' financial performance? *Strategic Management Journal* 26(10): 967–985.
- Kor YY, Mahoney JT, Michael S. 2007. Resources, capabilities, and entrepreneurial perceptions. *Journal of Management Studies* 44(7): 1185–1210.
- Lampel J, Shamsie J. 2000. Probing the unobtrusive link: dominant logic and the design of joint ventures at General Electric. *Strategic Management Journal* 21(5): 593–602.
- Lampel J, Shamsie J, Shapira Z. 2009. Experiencing the improbable: rare events and organizational learning. *Organization Science* 20(5): 835–845.
- Leonard-Barton D. 1992. Core capabilities and core rigidities: a paradox in managing new product development. *Strategic Management Journal*, Summer Special Issue 13: 111–125.
- Levitt B, March JG. 1988. Organizational learning. *Annual Review of Psychology* 14: 319–340.
- Mahoney JT. 1995. The management of resources and the resource of management. *Journal of Business Research* 33: 91–101.
- Mintzberg H. 2009. *Managing*. Berrett-Koehler: San Francisco, CA.
- Nahapiet J, Ghoshal S. 1998. Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review* 23(2): 242–266.
- Nelson RR, Winter SG. 1982. *An evolutionary theory of economic change*. Harvard University Press: Cambridge, MA.
- Ouchi WG. 1980. Markets, bureaucracies, and clans. *Administrative Science Quarterly* 25: 129–141.
- Penrose ET. 1959. *The Theory of the Growth of the Firm*. Oxford University Press: Oxford, UK.
- Pitcher P, Smith AD. 2001. Top management heterogeneity: personality, power, and proxies. *Organization Science* 12(1): 1–18.
- Prahalad CK, Bettis RA. 1986. The dominant logic: a new linkage between diversity and performance. *Strategic Management Journal* 7(6): 485–501.
- Priem RL, Butler JE. 2001. Is the resource-based theory a useful perspective for strategic management research? *Academy of Management Review* 26(1): 22–40.
- Priem RL, Lyon DW, Dess GG. 1999. Inherent limitations of demographic proxies in top management team heterogeneity research. *Journal of Management* 25(6): 935–953.
- Roberto MA. 2003. The stable core and dynamic periphery in top management teams. *Management Decision* 41(2): 120–131.
- Siggelkow N. 2002. Evolution toward fit. *Administrative Science Quarterly* 47(1): 125–150.
- Sirmon DG, Hitt MA. 2009. Contingencies within dynamic managerial capabilities: interdependent effects of resource investment and deployment of firm performance. *Strategic Management Journal* 30(13): 1375–1394.
- Sirmon DG, Hitt MA, Ireland RD. 2007. Managing firm resources in dynamic environments to create value: looking inside the black box. *Academy of Management Review* 32(1): 273–292.
- Teece DJ. 1986. Profiting from technological innovation. *Research Policy* 15(6): 285–305.
- Teece DJ. 2007. Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal* 28(13): 1319–1350.
- Teece DJ, Pisano G, Shuen A. 1997. Dynamic capabilities and strategic management. *Strategic Management Journal* 18(7): 509–533.
- Tripsas M. 1997. Surviving radical technological change through dynamic capabilities: evidence from the typesetter industry. *Industrial and Corporate Change* 6: 341–377.
- Tripsas M, Gavetti G. 2000. Capabilities, cognition, and inertia: evidence from digital imaging. *Strategic Management Journal*, October–November Special Issue 21: 1147–1161.
- Virany B, Tushman ML, Romanelli E. 1992. Executive succession and organization outcomes in turbulent environments: an organization learning approach. *Organization Science* 3(1): 72–91.

- von Krogh G, Roos J. 1996. A tale of the unfinished. *Strategic Management Journal* **17**(9): 729–737.
- Walsh JP. 1995. Managerial and organizational cognition: notes from a trip down Memory Lane. *Organization Science* **6**(3): 280–321.
- Walsh JP, Fahey L. 1986. The role of negotiated belief structures in strategy making. *Journal of Management* **12**(3): 325–338.
- Weick K. 1995. *Sensemaking in Organizations*. Sage: Thousand Oaks, CA.
- Zahra SA, George G. 2002. Absorptive capacity: a review, reconceptualization, and extension. *Academy of Management Review* **27**(2): 185–203.