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What is strategic leadership? Developing a framework for future research

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ABSTRACT

We attempt to bring clarity to the concept of strategic leadership and guide its development by reviewing and synthesizing the existing management literature on how top managers and board directors influence organizations. We propose a new definition of strategic leadership and offer a framework organized around the essential questions of what strategic leadership is, what strategic leaders do, why they do it, and how they do it. To answer these questions, we organize our review around the eight functions strategic leaders serve, the key attributes of strategic leaders, the theories scholars have used to relate these functions and attributes to outcomes, contextual factors, and the organizational outcomes that strategic leaders affect. We identify how strategic leadership research is concentrated in five streams that rarely interact with each other, and offer suggestions for connecting these streams. Our review provides a big picture of what is known about individuals at the top levels of organizations and highlights the key areas where future investigation is essential.

Introduction

How the behaviors and decisions of strategic leaders (CEOs, top managers, and board directors) impact organizations has long been a focus of management theorists, from classical works on executive behavior (Barnard, 1968; Mintzberg, 1973) to Hambrick and Mason's (1984) influential upper echelons perspective and the extensive research on boards of directors (e.g., Boyd, Haynes, & Zona, 2011; Forbes & Milliken, 1999). Although we have learned much from this vast and expanding field of research, a surprising lack of consensus remains on the concept of *Strategic Leadership*, as is evident from the wide variety of definitions and conceptualizations of strategic leadership that exist in the literature. In addition, the considerable fragmentation of the field and the lack of a cohesive set of findings highlight the need to present a more compelling definition of strategic leadership and to organize the field through an integrative framework that suggests opportunities for future research.

We address this need by offering a comprehensive and integrative framework of strategic leadership and several directions for future research. Our work is motivated by the essential questions of what strategic leadership is, what strategic leaders do, why they do it, and how

they do it. To answer these questions, we organize our review in terms of the *functions* of strategic leadership, the *attributes* of strategic leaders, the firm-level *outcomes* that strategic leaders influence, the *theories* and *mechanisms* that relate strategic leaders to these outcomes, and the *contextual factors* that moderate these relationships. We present an overview of our strategic leadership framework in Fig. 1.

Previous reviews have synthesized the literature relevant to individuals at higher organizational levels (mainly CEOs, TMTs, and the CEO-BOD interface). Table 1 lists many of these and summarizes their foci and conclusions. These reviews represent valuable efforts to understand strategic leadership and provide useful guidelines for future research. They also acknowledge that the literature is highly fragmented because of the wide variety of studied constructs (and measures) and firm-level outcomes, which makes it challenging to integrate findings and explanations and which causes theoretical silos. Common suggestions from these reviews are to reduce the fragmentation problem by using more encompassing constructs, performing large-scale studies to test multiple constructs simultaneously, developing and testing sequential process models, or integrating different theories (e.g., Bromiley & Rau, 2016; Liu, Fisher, & Chen, 2018; Wowak, Gomez-Mejia, & Steinbach, 2017). We acknowledge and agree with these

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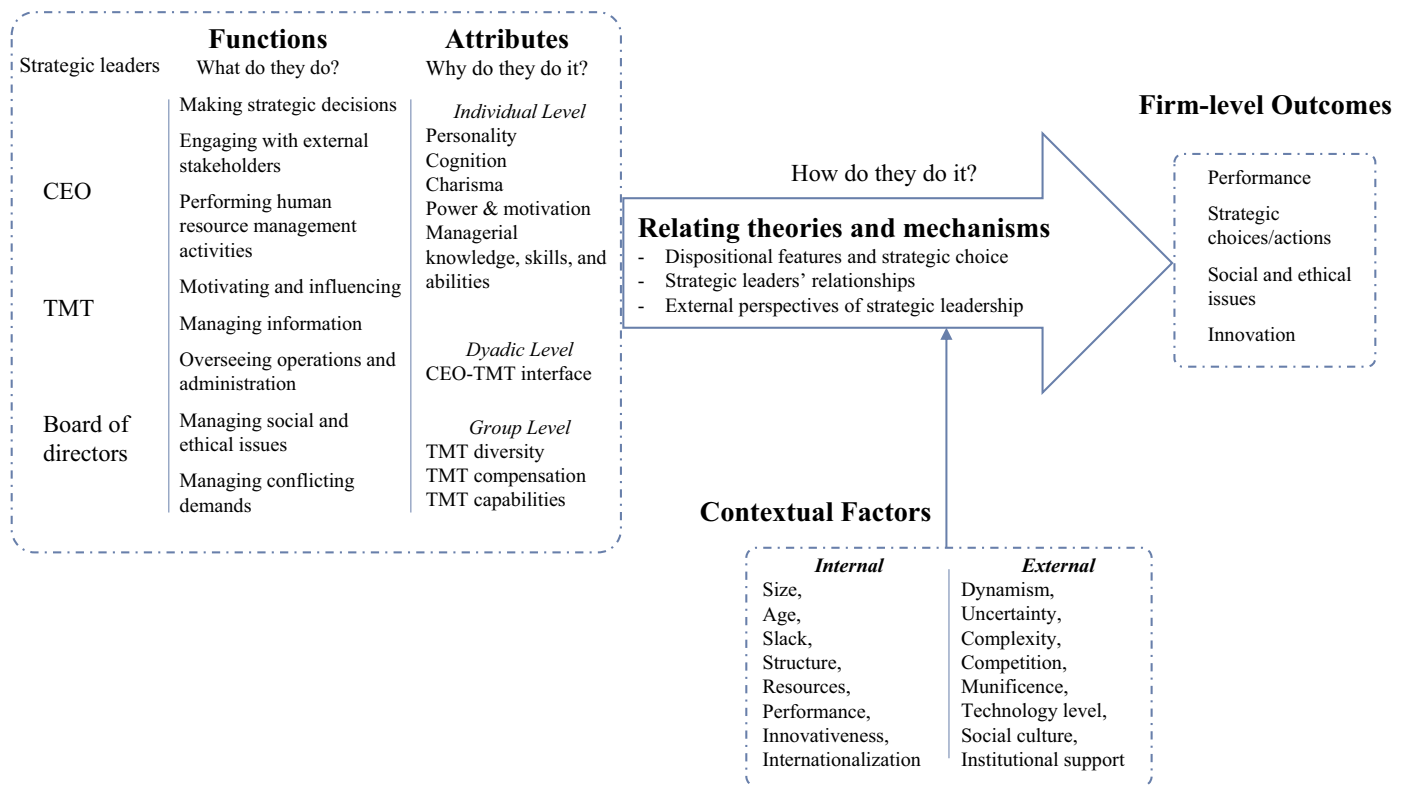


Fig. 1. Strategic leadership framework.

Table 1
Prior reviews on strategic leaders.

Review	Focus	Strategic leader	Main conclusions
Carpenter, Geletkanycz, and Sanders (2004)	Reviewing upper echelons research to identify challenges and opportunities	CEOs and TMTs	Define clearly the group of individuals who represent the upper echelons; substitute demographics with richer variables to capture executives' cognitions, values, and perceptions; explore additional mechanisms (besides strategic decisions) through which senior managers influence their firms.
Finkelstein, Hambrick, and Cannella (2009)	Reviewing research on senior executives	CEOs, TMTs, and BODs	Strategic leadership is broad and can be studied in multiple ways, but a paradigmatic focus that can lead to more coherent knowledge is lacking. Exploring interrelationships among strategic leaders and theorizing circular relationships is an essential challenge. Overall, the overlapping nature of strategic leadership demands theories and methods that advance knowledge across multiple fronts.
Boyd et al. (2011)	Synthesizing research on CEO-BOD interactions	CEOs and BODs	Six main theoretical perspectives to study CEO-BOD relationships offer competing or disparate explanations and there is inconsistency in measurement schemes. Integrating theories and taking contingency perspectives can bring progress to the topic.
Bromiley and Rau (2016)	Categorizing CEO and TMT characteristics that influence strategy and performance	CEOs and TMTs	There is general support for the CEO effect: a large number of CEO and TMT constructs are linked to a large number of firm outcomes. However, a coherent set of findings that synthesize this plethora of explanations is lacking.
Busenbark, Krause, Boivie, and Graffin (2016)	Advancing a configurational perspective of the CEO	CEOs	Research on CEOs can be organized around three perspectives: the CEO position, antecedents of CEO behavior, and the environment in which the CEO operates. The literature is fragmented and has inconsistent findings depending on the perspective.
Wowak et al. (2017)	Integrating drivers of executive behavior in one holistic framework	CEOs and TMTs	The use of a single motivational perspective to explain executive behavior causes fragmentation in the literature. Four motivational perspectives are present in the literature: financial self-interest, pay comparisons, personal preferences, and relational considerations. Integrating these perspectives can bridge silos and advance theoretical perspectives of executive behavior.
Liu et al. (2018)	Proposing elaborate process models to explain CEO influence on firm performance	CEOs and TMTs	The CEO-performance link is complex because CEO influence is transferred across multiple levels of analysis over time. There is a need to explore sequential mediation models on how CEOs influence performance through TMT and organizational processes.

suggestions. However, we also suggest that the apparent fragmentation of the literature is the result of the complexity of the topic and that an organized perspective of these silos would be useful to advance strategic leadership research. More specifically, we show that the role of

strategic leaders is multifaceted and complex, and that it can manifest in various firm-level outcomes in vastly different ways. We argue that developing theories and conducting studies that focus on the different aspects and dimensions of strategic leadership will enable future

scholars to build the coherent and comprehensive set of findings that strategic leadership scholars have called for. By organizing these dimensions of strategic leadership, our framework illustrates possibilities to connect separated perspectives and answer questions that are beyond the focus of one perspective.

Our review makes several contributions. First, we provide an integrative framework of strategic leadership that considers the role of all individuals at top organizational levels by including research on all strategic leaders (CEOs, TMTs, and BODs). Second, we address the common “black-box” problem, i.e., the need to study the underlying mechanisms of strategic leadership influence (Hambrick, 2007), by acknowledging and specifying the different ways in which strategic leaders influence firms. Third, by drawing on prior definitions and conceptualizations of strategic leadership, we develop a new, comprehensive, and concise definition of strategic leadership that draws clear boundaries for the field and can guide its future development. Finally, we illustrate the dominant streams of strategic leadership research and develop guidelines for scholars to bridge theoretical silos while acknowledging the multifaceted nature of the strategic leader role.

Definition

We begin our review by presenting prior definitions and conceptualizations of strategic leadership in Table 2 and proposing a new definition of strategic leadership. Strategic leadership is a term used broadly to refer to either a type of leadership style or to leadership at the top levels of the firm. We extracted definitions and common features of strategic leadership from seminal works (e.g., Andrews, 1980; Child, 1972; Mintzberg, 1973) and representative conceptual articles (e.g., Boal & Hooijberg, 2001; Boal & Schultz, 2007; Crossan, Vera, & Nanjad, 2008; Hutzschenreuter, Kleindienst, & Greger, 2012), and

found that a common conception of these works is that strategic leadership concerns the role and influence of individuals at top organizational levels.

We suggest that existing definitions and descriptions are either too narrow and thus fail to capture essential aspects of what strategic leaders do (which we will discuss later as the eight functions of strategic leaders) or too broad (e.g., strategic leaders “configure and leverage human and social capital to create value for the firm”; Hitt & Duane, 2002). Existing definitions typically either reduce strategic leadership to the creation of meaning, vision, and setting the objectives of the organization or merely specify who strategic leaders are (with the implication that anything they do is “strategic leadership”). We also wanted to avoid making our definition tautological by equating strategic leadership with its outcomes, which scholars have recognized as a problem with other leadership definitions (see Antonakis, Bastardoz, Jacquart, & Shamir, 2016; van Knippenberg & Sitkin, 2013).

Based on these conceptions, we define strategic leadership as the *functions performed by individuals at the top levels of an organization (CEOs, TMT members, Directors, General Managers) that are intended to have strategic consequences for the firm*. Our review identifies eight functions: *making strategic decisions; engaging with external stakeholders; performing human resource management activities; motivating and influencing; managing information; overseeing operations and administration; managing social and ethical issues; and managing conflicting demands*.

Identification of relevant strategic leadership studies

The domain of strategic leadership is broad and vaguely demarcated; therefore to conduct our review we searched for articles in top-tier journals that studied the effects of chief executive officers (CEOs), top management teams (TMTs), or boards of directors (BOD) on firm-

Table 2
Representative definitions and conceptualizations of strategic leadership.

Study	Details
Boal and Hooijberg (2001)	“the essence of strategic leadership involves the capacity to learn, the capacity to change, and managerial wisdom” (p. 515). “Strategic leadership focuses on the creation of meaning and purpose for the organization...Strategic theories of leadership are concerned with leadership of organizations... Strategic leadership focuses on the people who have overall responsibility for the organization...” (p. 516).
Boal and Schultz (2007)	“Supervisory theories of leadership (e.g., path-goal, contingency, LMX) focus on task and person-oriented behaviors of leaders as they attempt to provide guidance, support, and feedback to subordinates, while strategic leadership focuses on the creation of meaning and purpose for the organization” (p. 412).
Boal (2004)	“Strategic leadership is a series of decisions and activities, both process-oriented and substantive in nature, through which, over time, the past, the present, and the future of the organization coalesce. Strategic leadership forges a bridge between the past, the present, and the future, by reaffirming core values and identity to ensure continuity and integrity as the organization struggles with known and unknown realities and possibilities. Strategic leadership develops, focuses, and enables an organization's structural, human, and social capital and capabilities to meet real-time opportunities and threats. Finally, strategic leadership makes sense of and gives meaning to environmental turbulence and ambiguity, and provides a vision and road map that allows an organization to evolve and innovate” (p. 1504).
DeChurch, Hiller, Murase, Doty, and Salas (2010)	Leadership at the top levels of the firm involves establishing a vision and setting broad objectives for the overall organization.
Denis, Lamothe, and Langley (2001)	Strategic leadership is a dynamic and collective phenomenon and its influence extends beyond a focal organizational boundaries.
Elenkov, Judge, and Wright (2005)	“We define strategic leadership as the process of forming a vision for the future, communicating it to subordinates, stimulating and motivating followers, and engaging in strategy-supportive exchanges with peers and subordinates” (p. 666).
Finkelstein, Hambrick, and Cannella (1996)	“The study of executive leadership from a strategic choice perspective, or more concisely, strategic leadership, focuses on the executives who have overall responsibility for an organization—their characteristics, what they do, how they do it, and particularly, how they affect organizational outcomes. The executives who are the subjects of strategic leadership research can be individuals (e.g., CEOs or division general managers), groups (top management teams), or other governance bodies (e.g., boards of directors)” (p. 2).
Hambrick (2007)	“Leadership of a complex organization is a shared activity, and the collective cognitions, capabilities, and interactions of the entire TMT enter into strategic behaviors” (p. 334).
Hernandez, Eberly, Avolio, and Johnson (2011)	Individuals at the top of an organization are responsible for making strategic decisions. They also create an overall purpose and direction for the organization, which guide strategy implementation and formulation.
House and Aditya (1997)	“Strategic leadership is directed toward giving purpose, meaning, and guidance to organizations, [whereas supervisory leadership is] behavior intended to provide guidance, support, and corrective feedback for the day-to-day activities of work unit members” (p. 444).
Ireland and Hitt (1999)	Strategic leadership is “a person's ability to anticipate, envision, maintain flexibility, think strategically, and work with others to initiate changes that will create a viable future for the organization” (p. 43).
Vera and Crossan (2004)	Strategic leadership research focuses on the people at the top of the organization. It considers executive work not only as relational but also as a strategic and symbolic activity.

level outcomes, over the time period of January 2000 to October 2018. Review articles necessarily need to define and limit their scope (Cooper, 1988), and we decided that articles published in the 21st century represented a reasonable and longer timeframe than other reviews of related literature, which have typically focused on a 10-year time period (e.g., Bromiley & Rau, 2016; Wowak et al., 2017).

Similar to other reviews (e.g., Boyd et al., 2011; Busenbark et al., 2016), we limited our search to the following top-tier management journals: *Academy of Management Annals*, *Academy of Management Journal*, *Academy of Management Review*, *Administrative Science Quarterly*, *Journal of Applied Psychology*, *Journal of Management*, *Journal of Management Studies*, *Leadership Quarterly*, *Organization Science*, and *Strategic Management Journal*. Our focus with this review was on synthesizing a set of theoretical mechanisms identified in the literature rather than to summarize its key empirical findings (Ahuja, Lampert, & Tandon, 2008).

To find relevant articles, we read the titles and abstracts of each article in every issue of each of the above journals during the established timeframe. We verified our initial scan by searching each journal using a combination of the keywords *CEO*, *board*, *director*, *executive*, *TMT*, *top management*, *strategic leadership*, and *strategic leader*. Our search process resulted in 326 articles that related strategic leaders to firm-level outcomes.² We do not discuss each of these articles individually, but instead use selected examples to illustrate the accumulated knowledge and explain our strategic leadership framework.

Studies of top managers or BOD that did not address how strategic leaders' decisions and behaviors impact organizations did not fall under our definition and hence were not included in our review. For example, studies exploring how individuals reach executive positions (e.g., Fitzsimmons, Callan, & Paulsen, 2014) or how boards set executive compensation (e.g., Geletkanycz, Boyd, & Finkelstein, 2001) were not included unless they also studied firm-level outcomes. Therefore, we did include studies of how executive succession or executive compensation influenced firm-level outcomes (e.g., Makri, Lane, & Gomez-Mejia, 2006; Ridge, Aime, & White, 2015).

We followed an inductive categorization process and engaged in frequent discussions to develop our framework. The first two authors independently assigned and reviewed the articles, and identified relevant themes that could help answer our main motivating questions. We discussed emerging themes and categories in depth, reassigned articles, and debated our categorization until we reached a consensus. We intend to answer the first question (What do strategic leaders do?) in the *functions* section, the second question (Why do they do it?) in the *attributes* section, and the third question (How do they do it?) in the sections on *theories and mechanisms* and *contextual factors*. We also review *strategic-level outcomes* that strategic leaders influence and thus clarify differences between strategic leadership and other types of leadership.

Functions of strategic leaders

Strategic leaders are expected to fulfill specific roles and responsibilities (Mintzberg, 1973, 1997). The primary existing classification of responsibilities is Mintzberg's (1973) delineation of 10 managerial roles, based on an analysis of five CEOs over the course of one week. Subsequent work has distilled these into fewer roles (Kotter, 1982; Tsui, 1984). Rather than using a small sample of practicing managers, we base our identification of the functions of strategic leadership on what scholars have discussed in the literature. Moreover, executive roles may have changed in the past half century, making our categorization more relevant for strategic leadership in the 21st century. Our first goal in reviewing the strategic leadership research was to categorize such functions, provide a clearer view of the complexity of strategic leaders'

job, and highlight areas that need more investigation.

In this section, we discuss the eight main functions of strategic leadership that we extracted from the literature. Table 3 shows descriptions of these functions and our suggestions for linking strategic leadership functions to various firm-level outcomes. Table 4 presents example studies from the literature and relevant research questions.

Making strategic decisions

Strategic leaders influence organizations through the decisions they make (Hambrick & Mason, 1984). Unlike decisions made at lower organizational levels, upper echelons' decisions imply major allocations of resources and commitments that can have lasting implications for firms (Wang et al., 2016). Following this premise, scholars have explored the roles of strategic leaders in making a variety of strategic decisions (e.g., with regard to innovation, acquisitions, strategic change, or diversification). Research exploring this function concludes that a wide range of motivations guides the strategic decision-making process and that such decisions have important implications for firm-level outcomes (Wowak et al., 2017).

Despite the large body of research on the strategic decision function, several important aspects of the function are understudied. For example, in terms of the strategic decision-making process, researchers have given little attention to indecision (lack of decision-making) and the discarding of available choices. Strategic leaders sometimes delay or delegate certain strategic decisions because of potential difficulties or possible negative outcomes. The drivers behind such behaviors and their influence on the firm remain unexplored.

Leiblein, Reuer, and Zenger's (2018) recent work on the characteristics of strategic decisions highlights relevant opportunities to explore this function further. For example, available strategic alternatives are likely a result of prior commitments and decisions (Leiblein et al., 2018). An examination of changing patterns of strategic decisions over time might be more insightful for understanding strategic leadership, as gradual changes in a firm's strategy could reflect significant efforts from leaders to change the course of an organization.

Engaging with external stakeholders

Strategic leaders build and manage relationships outside the firm and represent the image of the firm to external parties. The *external leadership* function encompasses leaders' interactions with external parties that have the potential to influence the firm. These external leadership behaviors can deliver strategic advantages, such as providing access to important resources (Westphal et al., 2006) or enhancing the firm's reputation (Carter, 2006). External relationships can also help strategic leaders to navigate crises (Westphal et al., 2012).

One underlying theme of research on this function is that strategic leaders engage in external leadership both proactively and reactively. Future research could explore what different actions are required to succeed in each and how strategic leaders vary in their abilities to perform these actions. It would also be worth exploring how external leadership varies among CEOs, TMTs, and BODs, as both the types of relationships these types of leaders focus on and the benefits they extract are likely to differ.

Performing human resource management activities

Strategic leaders make decisions regarding the selection, evaluation, compensation, and development of other organization members. For example, BODs appoint, evaluate, and dismiss the CEO (Cook & Glass, 2014; Graffin et al., 2013), which has important implications for the firm. The BOD also sets the compensation of top executives, which influences executive behavior and firm-level outcomes. Different types of compensation incentives and possible compensation disparities among executives can influence firm performance (e.g., Ridge et al., 2015).

² A complete list of the studies is available upon request.

Table 3
Eight functions of strategic leaders.

Function	Definition	Proximal outcomes	Distant outcomes
Making strategic decisions	Making decisions on strategic changes and the overall direction of the firm	Attributes of strategic decisions	Competitive advantage Firm growth Relative performance Performance volatility
Engaging with external stakeholders	Representing the firm and managing relationships between the firm and both public and private entities	Firm-stakeholder relationships Competitive relationships	Stock-market performance Firm reputation
Performing human resource management activities	Making decisions regarding personnel selection and dismissal, setting compensation, and personnel evaluation and development	Changes in organizational structure Firm efficiency/Cost reductions Introduction and development of incentives and rewards Types of control and monitoring processes	Profitability and liquidity Performance volatility
Motivating and influencing	Motivating organizational members, establishing follower trust and a unified workforce, serving as a role model, shaping the firm's culture, and communicating a vision	Organizational culture Employee motivation	Firm growth Firm productivity
Managing information	Processing strategic information and distributing it to the different areas and hierarchical levels of the organization	Information withholding/manipulation patterns Attention biases	Organizational coordination Absorptive capacity
Overseeing operations and administration	Managing the development and implementation of structure and procedures, monitoring different areas, and delegating	Employee turnover Employee satisfaction	Firm productivity
Managing social and ethical issues	Steering the firm's moral behavior and controlling illegal behaviors of the firm	CSR engagement Engagement in controversial behaviors Adoption of illegal behaviors	Triple bottom line Long-term performance/survival Firm reputation
Managing conflicting demands	Attending to conflicting needs of different internal and external stakeholders and resolving conflicting strategic issues	Attention to different stakeholders Resource allocation patterns Organizational ambidexterity	Long-term performance/survival

Research also suggests that CEOs influence firm performance through their emphasis on strategic human resource management systems (Chadwick et al., 2015).

Future research is needed to increase our understanding of the strategic leader's role in managing human resources. For instance, leaders could set rewards and appoint specific individuals to motivate strategy implementation and better performance, but might also incentivize intense competition among organizational members or even unethical behavior in attempts to accomplish set goals.

Motivating and influencing

A noticeable line of research explores how the leadership styles displayed by strategic leaders are perceived by and influence followers. Behaviors displayed by strategic leaders can unify, motivate, and encourage followers to pursue a strategic vision as well as shape organizational culture. One important underlying assumption in studies of this function is that strategic leaders influence followers at lower levels of management, with whom there is little interaction, through a cascading influence (Bass, Waldman, Avolio, & Bebb, 1987). A prominent focus is on transformational leadership and its influence on outcomes such as firm performance, innovation, or climate (Boehm et al., 2015; Jung et al., 2008; Ou et al., 2014).

Studying the specific behavioral styles that strategic leaders display is valuable, but one significant effort is to contextualize these behaviors more clearly for top organizational levels. For example, Berson, Halevy, Shamir, and Erez (2015) argue that strategic leaders should construct visions more broadly and abstractly compared to lower-level managers. Additionally, the cascading effect has substantial complexity, as various leadership styles may or may not influence outcomes at distant levels (Chun et al., 2009). Overall, leadership styles may have different implications at the upper echelons than they do at lower levels of management. Furthermore, it might be possible to advance specific leadership styles that are unique to top managerial contexts and to evaluate whether motivation and influence emanate from the BOD. Also, several leadership styles beyond transformational leadership might have relevance for strategic leaders (Anderson & Sun, 2017).

Managing information

Strategic leaders gather, process, and use the information available in both internal and external environments (Kaplan, 2008; Nadkarni & Chen, 2014). Besides using that information to make decisions, strategic leaders can influence the firm's access to information as well as its integration and distribution throughout the firm (Cao et al., 2015; Carpenter & Sanders, 2004). This research links closely to the principle of bounded rationality and how strategic leaders tend to allocate their attention. Gathering, processing, and distributing information can shape the organization in several ways and represents a challenging effort for strategic leaders that confront a wide variety of stimuli in typically uncertain environments.

Strategic leaders have privileged access to information and can choose to frame, distribute, and withhold it on the basis of various interests. We speculate that strategic leaders have varied tendencies regarding how such information is managed throughout the firm in terms of content, timing, and communication tactics. How strategic leaders use this privilege and its consequences for stakeholders is an interesting avenue to explore. Some types of information may be more noticeable, challenging to interpret, or difficult to communicate. Existing information processing theories could add insight into this function (see Oppenheimer & Kelso, 2015).

Overseeing operations and administration

Strategic leaders can be the architects of the organizational structure (Beckman & Burton, 2008; Miller & Dröge, 1986), set conditions to support learning processes (Hannah & Lester, 2009), and put procedures in place to monitor other organizational members (Wowak et al., 2015). The ability of these initiatives to shape reporting relationships, procedures, and controls can have significant implications for the implementation of strategies, adaptation to changing environments, and firm performance (Sine, Mitsuhashi, & Kirsch, 2006).

Few studies have explored the involvement of strategic leaders in specific, operational decisions that are made on a day-to-day basis (Wang et al., 2016). Although the importance of setting firms' strategic

Table 4
Examples and research questions for functions of strategic leadership.

Examples	Relevant research questions
MAKING STRATEGIC DECISIONS	
Strategic change (Karaevli, 2007; Nakauchi & Wiersema, 2015; Quigley & Hambrick, 2012)	* How does the strategic decision making process change across CEOs, TMTs and BODs?
Commitment to status quo (McClelland, Liang, & Barker, 2010)	* When and how do strategic leaders avoid making decisions?
Investment and resource allocation (Heyden, Kavadis, & Neuman, 2017; Vieregger, Larson, & Anderson, 2017)	* How do strategic leaders decide not to pursue a strategic alternative?
Acquisitions and divestitures (Nadolska & Barkema, 2014; Pathak, Hoskisson, & Johnson, 2014)	* How do strategic leaders make decisions when there are multiple strategic alternatives?
Strategic risk taking (Kish-Gephart & Campbell, 2015; Lim, 2015)	
Strategic dynamism and nonconformity (Wowak, Mannor, Arrfelt, & McNamara, 2016)	
Diversification (Alessandri & Seth, 2014)	
Competitive actions (Marcel, Barr, & Duhaime, 2010)	
ENGAGING WITH EXTERNAL STAKEHOLDERS	
TMT and board attributes influence investor decisions (Cohen & Dean, 2005; Higgins & Gulati, 2006; Ridge & Ingram, 2017; Wang & Song, 2016)	* What makes a strategic leader excel at this function?
Establish political ties, social connections, and interactions with external stakeholders, such as venture capitalists or journalists (Cao, Maruping, & Takeuchi, 2006; Fanelli, Misangyi, & Tosi, 2009; Park & Tzabbar, 2016; Westphal & Deephouse, 2011; Zheng, Singh, & Chung, 2017)	* Which external leadership behaviors are more likely to improve firm performance?
Manage firm-customer relationships (Luo, Kanuri, & Andrews, 2014)	* How do strategic leaders attempt to shape the image of the firm?
Construct friendship ties with other organizations (Westphal, Boivie, & Chng, 2006)	* How do strategic leaders handle the firm's image in light of crises or unexpected events?
Assist other strategic leaders in crises situations (Westphal, Park, McDonald, & Hayward, 2012)	* How do strategic leaders divide attention among various stakeholders?
Engage in reputation management activities (Carter, 2006)	* How do external leadership activities differ among CEOs, TMTs, and BODs?
Diversify the firm's networks (Beckman, Schoonhoven, Rottner, & Kim, 2014)	
Engage in stakeholder management (Coombs & Gilley, 2005)	
PERFORMING HUMAN RESOURCE MANAGEMENT ACTIVITIES	
Compensation setting and incentive schemes (Datta & Iskandar-Datta, 2014; Makri et al., 2006; O'Connell & O'Sullivan, 2014)	* How are CEOs and TMTs involved in selecting and compensating employees?
CEO-TMT compensation disparity (Ridge et al., 2015)	* How are CEOs and TMTs involved in promotion and incentive policies?
TMT to worker compensation disparity (Connelly, Haynes, Tihanyi, Gamache, & Devers, 2013)	* How do top managers use HR management to support strategy implementation?
CEO appointment and dismissal (Cook & Glass, 2014; Halebian & Rajagopalan, 2006; Zhang, 2006)	* When do CEOs attempt to develop other top managers to succeed them?
CEO succession (Karaevli, 2007; Wang, Holmes Jr, Oh, & Zhu, 2016; Westphal & Fredrickson, 2001)	* Do executives attempt to mitigate compensation disparities?
CEO duality (Krause & Semadeni, 2014)	* How do CEOs evaluate the performance of other executives?
CEO evaluation (Graffin, Boivie, & Carpenter, 2013)	
CEO influence on HRM (Chadwick, Super, & Kwon, 2015; Zhu, Chew, & Spangler, 2005)	
MOTIVATING AND INFLUENCING	
CEO charisma, identity strength, and firm performance (Boehm, Dwertmann, Bruch, & Shamir, 2015)	* How does executives' cascading influence shape behavior at different hierarchical levels of the firm?
Charismatic leadership across levels (Chun, Yammarino, Dionne, Sosik, & Moon, 2009)	* How does executives' leadership style influence BOD decisions?
CEO transformational/transactional leadership and innovation (Elenkov et al., 2005)	* How can we conceptualize a BOD's leadership style and its implications?
CEO transformational/transactional leadership and exploratory and exploitative innovation (Jansen, Vera, & Crossan, 2009)	* Which type of behaviors displayed by strategic leaders are more likely to influence the organizational culture?
CEO transformational leadership and organizational innovation (Jung, Wu, & Chow, 2008)	* * How are strategic leaders able to adapt their leadership style according to situational settings?
CEO leadership behavior and organizational culture (Tsui, Zhang, Wang, Xin, & Wu, 2006)	
CEO leadership behaviors and employee attitudes (Wang, Tsui, & Xin, 2011)	
CEO transformational leadership, TMT effectiveness, and firm performance (Zhang, Li, Ullrich, & van Dick, 2015)	
CEO empowering leadership and empowering organizational climate (Ou et al., 2014)	
MANAGING INFORMATION	
Attending to and processing environmental information (Kaplan, 2008; Nadkarni & Barr, 2008; Nadkarni & Chen, 2014; Surroca, Prior, & Tribó Giné, 2016)	* How do strategic leaders frame information to accomplish their goals?
Shaping firms' access to and distribution of information (Cao, Simsek, & Jansen, 2015; Carpenter & Sanders, 2004; Chen, Treviño, & Hambrick, 2009)	* Why and in what conditions do strategic leaders withhold information from other organizational members?
	* Do strategic leaders use different tactics to communicate information and do these tactics vary according to the recipient of the information?
	* Does the content and attributes of information influence strategic leaders' attention to and perception of that information?
OVERSEEING OPERATION AND ADMINISTRATION	
TMT support for safety (Tucker, Ogunfowora, & Ehr, 2016)	* How do strategic leaders' attributes influence day-to-day, operational decisions?
CEO overconfidence and management processes (Chen, Crossland, & Luo, 2015)	* How do CEOs employ this function to support strategy implementation?
CEO degree of caution and product safety (Wowak, Mannor, & Wowak, 2015)	* What decisions are CEOs and TMTs likely to delegate?
Board human capital and CEO monitoring (Khanna, Jones, & Boivie, 2014)	* How do strategic leaders monitor different areas of the firm and what criteria do they use to evaluate these areas?
	* How often and under what conditions do strategic leaders change the organizational structure?
MANAGING SOCIAL AND ETHICAL ISSUES	
Strategic leadership fraud (Zahra, Priem, & Rasheed, 2005)	* What are the main motivations for strategic leaders to engage in CSR strategies?
TM political orientation and firm tax avoidance (Christensen, Dhaliwal, Boivie, & Graffin, 2014)	

(continued on next page)

Table 4 (continued)

Examples	Relevant research questions
<p>2015)</p> <p>CEO personality and CSR engagement (Chin, Hambrick, & Treviño, 2013; Petrenko, Aime, Ridge, & Hill, 2016; Tang, Qian, Chen, & Shen, 2015)</p> <p>CEO compensation and CSR engagement (Deckop, Merriman, & Gupta, 2006)</p> <p>CEO compensation and financial misrepresentation (Harris & Bromiley, 2007)</p> <p>Shareholder-TMT information asymmetry and financial reporting fraud (Ndofor, Wesley, & Priem, 2015)</p> <p>Executive leadership and corruption (Pearce, Manz, & Sims, 2008)</p>	<ul style="list-style-type: none"> * When and how do executives and board members ignore unethical or controversial behaviors if those behaviors are providing benefits for the firm? * How can strategic leaders control corruption inside the firm? * What are the major ethical dilemmas that strategic leaders have to manage? * What different types of CSR strategies can strategic leaders pursue and why do they pursue them?
MANAGING CONFLICTING DEMANDS	
<p>TMT faultlines and firm performance (Georgakakis, Greve, & Ruigrok, 2015)</p> <p>Board polarization (Zhu, 2014)</p> <p>TMT behavioral integration and organizational ambidexterity (Carmeli & Halevi, 2009; Lubatkin, Simsek, Ling, & Veiga, 2006)</p> <p>CEO transformational leadership and exploratory/exploitative innovation (Jansen et al., 2009)</p> <p>TMT transactive memory systems and organizational ambidexterity (Heavey & Simsek, 2014)</p>	<ul style="list-style-type: none"> * How do conflicts among strategic leaders arise? * How do strategic leaders deal with power gaps in order to advance their initiatives? * How do strategic leaders interpret and reconcile information to decide among conflicting strategic alternatives? * Does managing contradictions have an impact on strategic leaders' affect or stress? * Do strategic leaders delegate or postpone decisions when there are contradictory demands? * How do strategic leaders balance short- and long-term horizons of strategic decisions?

direction is undisputed, activities essential to this function are crucial for strategic leadership influence, because they set the organizational context and influence the execution of initiatives. Qualitative methods and theories from other business disciplines could shed more light on how this function is performed in practice.

Managing social and ethical issues

Research has linked strategic leaders to a variety of outcomes related to social or ethical issues, ranging from engagement in fraud or tax avoidance (Zahra et al., 2005) to corporate social responsibility (CSR) (Petrenko et al., 2016; Tang, Qian, et al., 2015). In turn, these behaviors and initiatives have important implications for stakeholders, firm reputation, and performance (Zahra et al., 2005). Strategic leaders, especially CEOs, have considerable discretion regarding decisions about tax avoidance or resource allocation for CSR (Waldman & Siegel, 2008). Furthermore, strategic leaders are usually accountable for major ethical scandals, even if they are unaware of them (Kollewe, 2015). This function is becoming increasingly important as stakeholders demand that organizations be more responsible social actors.

Conceptual work on destructive and responsible leadership has provided frameworks that can guide future research on this function (Krasikova, Green, & LeBreton, 2013). The nature of ethical dilemmas faced by strategic leaders and how these dilemmas vary among CEOs, TMTs, and BODs is an interesting avenue for future work. For example, important challenges at the strategic leadership level are estimating the negative consequences of particular initiatives and finding ways to disincentivize inappropriate and illegal behavior.

Managing conflicting demands

A prominent line of research centers on how strategic leaders reconcile and pursue conflicting goals and directions for the firm, such as exploration and exploitation or long- and short-time horizons (Lavie, Stettner, & Tushman, 2010; Smith & Tushman, 2005). Their role extends to managing conflicts and disagreements, which can lead to significant group decision-making tendencies that influence firm performance (Georgakakis et al., 2015; Zhu, 2014). Factors that help leaders to address conflicting strategic issues include transactive memory, behavioral integration, leadership styles, and CEO and TMT shared experience (Carmeli & Halevi, 2009; Heavey & Simsek, 2014; Jansen et al., 2009; Lubatkin et al., 2006).

Conflict and power differences among strategic leaders (within the TMT, between the CEO and the TMT, and between the board and the

CEO or other top managers) could be studied further by exploring why and how these conflicts arise or how leaders attempt to solve them. Krause, Priem, and Love's (2015) study on power gaps between co-CEOs and Garg and Eisenhardt's (2017) qualitative inquiry on CEO/BOD relationships are good examples of how to approach this topic. From an individual-level perspective, more attention could be placed on how strategic leaders interpret and reconcile conflicting information to make decisions with firm-level impact. Different stakeholders remain under-explored as sources of conflicting information and challenges for strategic leaders (Wong et al., 2011). Handling these conflicts might have important implications for strategic leaders' behavior. For example, such disagreements might provide strategic leaders with challenging demands that might increase the stress they manifest in their leadership (see Hambrick, Finkelstein, & Mooney, 2005).

Strategic leaders' attributes

We use the term "attributes" for the traits, skills, and characteristics of strategic leaders at the individual and team levels. We review and classify these attributes in this section and present relevant examples and research directions in Table 5.

Individual-level characteristics

Dispositions

Scholars have assumed that the dispositional traits of strategic leaders affect their decisions and behaviors and are reflected in firm-level outcomes (Hambrick & Mason, 1984). Among the most studied attributes of strategic leaders in our review are personality traits, including the Big Five, core self-evaluations, and narcissism (Gerstner, Konig, Enders, & Hambrick, 2013; Nadkarni & Herrmann, 2010; Zhang, Ou, Tsui, & Wang, 2017). Difficulties in measuring the personality characteristics of strategic leaders directly have led researchers to use proxies such as demographic variables. For example, risk-taking propensity has mostly been studied using proxies such as age or political orientation (Christensen et al., 2015). However, using proxies is problematic; results of a recent meta-analysis, for instance, do not support the use of age as a proxy for risk-taking (Wang et al., 2016). It is also essential to differentiate the dispositional risk-taking propensity of leaders from strategic risk-taking at the firm level, despite the likelihood that they are related. Given the problems of using demographic proxies (Carpenter et al., 2004), more scholars are directly measuring personality traits in recent years and this is a definite improvement in methodology (Harrison, Thurgood, Boivie, & Pfarrer, 2019).

Table 5
Attributes of strategic leaders.

Category	Attributes	Examples	Limitations and future directions
Individual-level characteristics	Personality (Narcissism, hubris, core self-evaluations, greed, Big Five, and risk-taking propensity)	Narcissistic CEOs' risk taking has negative consequences at the onset of crisis but positive consequences in the post-crisis period (Patel & Cooper, 2014). Narcissistic CEOs use their power to hire directors that support their risky decisions (Zhu & Chen, 2015). CEO narcissism increases the level of organizational CSR (Petrenko et al., 2016) and entrepreneurial orientation (Wales, Patel, & Lumpkin, 2013). CEO hubris reduces organizational CSR (Tang, Qian, et al., 2015) and increases firm innovation (Tang, Li, & Yang, 2015). CEO core self-evaluations are associated with entrepreneurial orientation (Simsek, Heavey, & Veiga, 2010). CEO personality (Big Five) affects firm performance through strategic flexibility (Nadkarni & Herrmann, 2010).	* Investigating personality constructs separately has led to an incomplete and even inconsistent understanding of their role in strategic leadership. * Direct measurement of personality characteristics of strategic leaders is difficult and some proxies are weakly associated with personality traits.
	Managerial cognition (Attention, causal logics, mental models, cognitive community, ambivalence, and construal levels)	CEO attention to a new technology predicts adoption of the technology (Kaplan, 2008). CEO ambivalence affects firms' responses to strategic issues (Plambeck & Weber, 2009). Attention focus and causal logics of top managers affect the speed of response to changes in the environment (Nadkarni & Barr, 2008).	* The large variety of constructs suggests the need of an integrative guiding framework.
	Charisma	Organizational performance is associated with subsequent perceptions of CEO charisma, but the opposite is not true (Agle, Nagarajan, Sonnenfeld, & Srinivasan, 2006).	* There are mixed findings regarding the effect and origin of charisma.
	Power and motivation	Firms with dominant CEOs show extreme performance (Tang, Crossan, & Rowe, 2011). Adoption of long-term compensation plans for CEOs increases investments in R&D, engagement in stakeholder relations, and firm value (Flammer & Bansal, 2017).	* Focusing exclusively on economic incentives and formal sources of power limits our comprehensive understanding of strategic leaders' power and motivation.
Group-level characteristics	Managerial knowledge, skills, and abilities	Firms led by graduates of top universities show higher performance (Miller, Xu, & Mehrotra, 2015). Insider CEOs' firm-specific knowledge can be a critical success factor as well as a source of inertia (Chung & Luo, 2013; Karaevli, 2007; Zhang & Rajagopalan, 2010). CEO experience signals organizational legitimacy, which in turn influences investor decisions (Higgins & Gulati, 2006).	* Empirical research is needed to examine the role of specific skills and abilities. * Credentials attributed by society such as celebrity should be a focus of future research.
	Diversity (TMT/board heterogeneity and faultlines)	TMT tenure heterogeneity affects firm performance positively and this relationship is moderated by TMT structural interdependence (Hambrick, Humphrey, & Gupta, 2015). TMT educational, functional, and tenure heterogeneity increases firm performance (Carpenter, 2002). TMT functional diversity's impact on firm innovation is contingent upon environmental factors (Qian, Cao, & Takeuchi, 2013). TMT nationality diversity influences firm performance positively (Nielsen & Nielsen, 2013). Task-related faultlines within the TMT have a positive effect on product expansion while biodemographic faultlines have a negative impact (Hutzschenreuter & Horstkotte, 2013). TMT tenure diversity increases and TMT faultlines decrease the novelty of the geographic location of investments (Barkema & Shvyrkov, 2007). The diversity of board members' experiences increases the rate of diverse alliances (Beckman et al., 2014). TMT informational faultline strength affects firm performance contingent upon environmental factors (Cooper, Patel, & Thatcher, 2014).	* Mixed findings regarding the impact of diversity suggests that potential moderating and mediating factors should be included. * The role of diversity among strategic leaders in how they perform strategic leadership functions should be a future research direction.
	TMT compensation	TMT pay dispersion affects firm performance negatively especially when dispersion exceeds justifiable levels (Fredrickson, Davis-Blake, & Sanders, 2010). There is a U-shaped relationship between TMT pay disparity and firm performance (Ridge et al., 2015).	* Research has focused on the consequences of TMT compensation, leaving its predictors unexplored.

(continued on next page)

Table 5 (continued)

	TMT capabilities	TMT industry experience reduces the liability of newness newness problem (Kor & Misangyi, 2008) and enhances firm growth (Kor, 2003). TMT employment affiliations can signal the market and attract investors (Higgins & Gulati, 2006). CEO-TMT pay disparity creates perceived inequity within the TMT and leads to behavioral fragmentation and possible turnover, hurting information-processing ability and subsequent firm performance (Carpenter & Sanders, 2004). CEO transformational and empowering leadership styles can promote TMT performance and behavioral integration (Carmeli, Schaubroeck, & Tishler, 2011; Stoker, Grutterink, & Kolk, 2012). CEO-TMT socio-demographical similarity and tenure overlap can moderate the negative effect of TMT knowledge-based faultiness on firm performance (Georgakakis et al., 2015).	* The distribution of TMT capabilities can have a substantial effect on the execution of different leadership functions. * Several factors at the individual or group-level might have firm-level outcomes contingent upon the CEO-TMT interface.
Interface	CEO-TMT interface		

Contradictory findings related to the impact of leaders' attributes on firms and inconsistent consequences of constructs that theoretically overlap (e.g., narcissism and hubris) have raised the need to use holistic frameworks and investigate the impact of various constructs simultaneously (Bromiley & Rau, 2016). Capturing and comparing multiple constructs in the same study represents a necessary effort to determine their relative importance in shaping strategic leaders' behavior (Wowak et al., 2017).

Managerial cognition

The managerial cognition literature studies factors that affect executives' attention, interpretations, and consequent decisions (Daft & Weick, 1984; Ocasio, 1997). The cognitive view contends that executives' cognition is an important driver of the strategic orientation of firms, in contrast to an economic or deterministic view, which recognizes external factors such as industry structure and firm capabilities as the primary drivers (Nadkarni & Barr, 2008). Research in this area confirms the impact of managers' cognition in conjunction with environmental factors on the strategic actions of firms, questioning the boundary between the economic and cognitive perspectives (Kaplan, 2008; Kiss & Barr, 2015), and suggesting the need to study environmental and cognitive factors jointly because they are not independent. For example, Nadkarni and Barr (2008) found that the cognitive frameworks of top managers mediate the relationship between industry velocity and strategic actions. Overall, the cognition literature acknowledges the importance of individual dispositions and environmental factors in shaping cognitive processes that interact with contextual factors to affect the strategic actions of firms. Our review of the managerial cognition literature reveals a vast number of constructs that have often been used interchangeably (e.g., mental models/maps, cognitive representations/ frameworks), and this suggests the need for an integrative guiding framework.

Charisma

House (1976) characterized charismatic leaders as those with traits such as exceptional self-confidence as well as strong motivation to attain and assert influence. Although executives' charisma could be expected to increase subordinates' motivation and ultimately firm performance, findings are mixed (e.g., Tosi, Misangyi, Fanelli, Waldman, & Yammarino, 2004; Waldman, Javidan, & Varella, 2004). In an attempt to reconcile the diverse conclusions in the literature on CEO charisma, Agle et al. (2006) conducted a longitudinal study and found that although organizational performance is associated with subsequent perceptions of CEO charisma, the opposite is not true. Recently, Wowak et al. (2016) examined more proximal strategic outcomes of CEO charisma and found evidence that it impacted strategic dynamism, strategic nonconformity, and CSR.

Power and motivation

Corporate governance researchers have studied power and motivation by considering strategic leaders' compensation and ownership, under the assumption that managers are self-interested and risk-averse (Eisenhardt, 1989) and that powerful strategic leaders have greater discretion (Tang et al., 2011). Studies of motivation usually focus on extrinsic motivation by investigating the role of compensation on behavior, especially when managers have discretion to pursue self-interests. Agency theorists have mostly looked at CEO power by studying duality (CEOs who also serve as the board chairpersons), neglecting other drivers and types of power. However, Park and Tzabbar (2016) explored various consequences of structural and expert power. While the literature supports the role of power and incentives on the strategic actions of executives, our understanding in this area is limited by the focus on economic incentives and formal sources of power. Considering other motivators, such as professional achievements, social recognition, or task-related factors that create intrinsic motivation could complement this research.

Managerial knowledge, skills, and abilities

Scholars have emphasized the importance of strategic leaders' competencies (Andrews, 1980; Helfat & Peteraf, 2015), assuming that the effective execution of leadership functions requires superior competencies. Not surprisingly, executive performance is predicted by direct measurements of competencies such as problem-solving as well as indirect proxies such as university degrees to capture intelligence. Several conceptual articles have proposed specific skills and abilities as playing important roles in strategic leadership processes. Researchers have argued that some of the skills and competencies required for top managers include timely decision making (Boal & Hooijberg, 2001), cognitive and behavioral complexity (Boal & Hooijberg, 2001), thinking with large horizons (DeChurch et al., 2010), the courage to defend strategies (Andrews, 1980), and the ability to adapt leadership styles (Vera & Crossan, 2004). Future empirical research is needed to examine these characteristics.

Another approach to studying managerial competencies is to focus on how executives gain specialized knowledge and how these context-specific competencies affect their performance. This approach emphasizes strategic leaders' firm-, industry-, and job-specific knowledge and experience. For example, Cummings and Knott (2018) found that insider CEOs are more successful than outsiders in managing R&D resources effectively. Bermiss and Murmann (2015) found that the loss of a top executive with a functional background is more harmful to a firm's survival than losing a top executive whose background is in managing external relationships. Some examples of context-specific competencies that affect subsequent actions include the CEO's experience in implementing a certain strategy (Westphal & Fredrickson, 2001),

directors' acquisition experience (Kroll, Walters, & Wright, 2008), TMT international exposure (Lee & Park, 2008), and the CEO's education (Datta & Iskandar-Datta, 2014).

A third approach views competencies as credentials, observable strategic leaders' characteristics—such as affiliations—discernable to the public and BOD and capable of affecting firms by signaling legitimacy. Directors or investors often rely on heuristics to assess the potential value that a certain leader might bring to a firm. Credentials such as celebrity should be a focus of future research (Treadway, Adams, Ranft, & Ferris, 2009).

Group-level characteristics

Diversity

TMT heterogeneity, which refers to variation in strategic leaders' attributes, has been the central construct in TMT composition research (Hambrick et al., 2015). Scholars have viewed TMT heterogeneity as a double-edged sword that can be beneficial for certain purposes in specific contexts and detrimental in others. According to the information-processing perspective, demographic heterogeneity may be considered a valuable resource because it provides multiple perspectives as well as increased levels of information (Bantel & Jackson, 1989; Elenkov et al., 2005), thus enhancing idea generation in firms or management of cross-border activities. On the other hand, TMT diversity may lead to interpersonal and affective conflict, which can potentially harm firm performance (Amason, 1996; Hambrick et al., 2015). Team diversity may also lead members to sort each other into social categories or to create hypothetical divides that may split a group into subgroups (Cooper et al., 2014). These divisions can create negative stereotypes of members of other categories and are harmful to team integration and communication (Bantel & Jackson, 1989). Despite mixed findings regarding the effects of TMT diversity (Certo, Lester, Dalton, & Dalton, 2006), there seems to be consensus regarding the negative effects of bio-demographic faultlines on strategic outcomes (Hutzschenreuter & Horstkotte, 2013; Ndofor, Sirmon, & He, 2015).

Adding potential moderating and intervening factors could provide dynamic process theories of TMT characteristics and firm-level outcomes and help resolve inconsistent findings in this literature (Certo et al., 2006; Wei & Wu, 2013). For instance, Hambrick et al. (2015) showed that the effect of TMT heterogeneity on firm performance depends on the TMT's role interdependence. Future research could explore how diversity among strategic leaders affects strategic leadership functions. For example, TMT behavioral integration could help leaders manage contradictions (Carmeli & Halevi, 2009; Lubatkin et al., 2006). Additionally, diverse teams might be better at handling functions that require heterogeneous competencies.

TMT compensation

Scholars have explored the consequences of TMT compensation differences. Building on social comparison theory, Carpenter and Sanders (2004) argued that CEO-TMT pay disparity creates perceived inequity in the TMT and leads to behavioral fragmentation and possible turnover, damaging information-processing ability and subsequent firm performance. On the other hand, tournament theory suggests that pay dispersion promotes competition within the team and positively affects team performance (Fredrickson et al., 2010). Although it has received less attention than CEO compensation, TMT compensation is an important part of the human resource function, and studying it might reveal CEOs' approaches to performing this function. Prior research has investigated the consequences of TMT compensation, but not its predictors.

TMT knowledge, skills, and abilities

The upper echelons perspective suggests that strategic leadership is not limited to the actions of CEOs, highlighting the importance of other top managers, who also need certain competencies to perform their

functions effectively. Such capabilities not only affect the performance of executives but also signal outsiders, especially in small and young firms in situations such as initial public offerings (IPOs). Additionally, some researchers have compared TMT members' capabilities with those of CEOs to study top managers' eligibility to become CEOs and how the existence of an heir apparent affects strategic outcomes (Ridge et al., 2015; Shen & Cannella, 2003). Future research should investigate the relationship of TMT capabilities and the distribution of capabilities within the TMT to the execution of strategic leadership functions.

CEO-TMT interface

A recent trend is to study strategic leader interactions, particularly between CEOs and their TMTs. For example, TMT members can respond negatively to CEOs who develop relationships of better quality with other team members, generating consequences for the TMT's potency or psychological empowerment (Lin & Rababah, 2014; Zhang et al., 2015).

Research on the CEO-TMT interface has also focused on demographic (dis)similarities between CEOs and TMTs. Just like TMT heterogeneity, CEO-TMT differences can have positive consequences via better information processing or negative effects via conflict and poor communication. For instance, Georgakakis et al. (2015) found a positive impact of CEO-TMT socio-demographical similarity on tenure overlap, whereas Ling, Wei, Klimoski, and Wu (2015) found that dissimilarity in informational demographics between CEOs and TMTs enhanced the effectiveness of CEO empowering leadership on firm performance, especially with increased CEO-TMT tenure overlap. In general, CEO-TMT interface studies, which are rapidly increasing in number, could benefit from team-level studies developed in the field of organizational behavior (see Maloney, Bresman, Zellmer-Bruhn, & Beaver, 2016). Moreover, CEO-TMT interface factors can complement our understanding of individual- and team-level attributes, because it is possible that the impact of several individual- and team-level factors depend on the interface factors. For example, certain behaviors of CEOs toward top managers might mitigate the negative impact of pay disparity within TMT.

Theories and mechanisms

We classify the theories used to explain how strategic leaders influence their firms into three categories: dispositional features and strategic choice, strategic leader relationships, and external perspectives. We present these categories, with relevant examples, in Table 6.

Dispositional features and strategic choice

This category consists of studies that connect leader attributes to strategic leadership information processing and decision making, which in turn shape the strategic choices made by leaders and subsequently firm-level actions. Hambrick and Mason's (1984) upper echelons theory is the dominating umbrella covering this group and arguably most strategic leadership research (Finkelstein et al., 2009). This theory draws on bounded rationality (March & Simon, 1958) to argue that strategic leaders' decision-making patterns reflect their dispositions and cognitive limitations, which in turn influence firm-level outcomes through top managers' strategic choices. Scholars initially relied on demographic and/or observable variables to capture executives' dispositions or decision-making and behavior patterns, but studies now increasingly attempt to capture strategic leaders' characteristics through non-demographic variables (e.g., personality, attention, cognition) to provide greater reliability and explore deeper cognitive and behavioral influences (Bromiley & Rau, 2016).

Decision-making limitations and biases have been invoked to relate dispositional features to strategic choices. For example, overconfidence might lead executives to overestimate their abilities while underestimating those of competitors and overlooking external factors that

Table 6
Theories and mechanisms.

Categories	Common theories	Examples	Limitations and future directions
Dispositional features and strategic choice	Upper echelons theory; Managerial cognition; Behavioral decision making (the behavioral theory of the firm, prospect theory, threat rigidity); Individual learning; Leadership styles	<p>Confidence in one's abilities affects market entry decisions (Cain, Moore, & Haran, 2015).</p> <p>Overconfident CEOs are less responsive to corrective feedback (Chen et al., 2015).</p> <p>Prior acquisition experience of strategic leaders improves acquisition decisions of the focal firm (Kroll et al., 2008; McDonald, Westphal, & Graebner, 2008; Nadolska & Barkema, 2014).</p> <p>CEO attention to a new technology affects the firm's investments in that area (Kaplan, 2008).</p> <p>Cognitive frameworks of executives influence competitive dynamic behavior of firms (Marcel et al., 2010).</p> <p>CEO regulatory focus impacts firm acquisitions (Gamache, McNamara, Mannor, & Johnson, 2015).</p> <p>TMT polychronicity affects firm performance through strategic decision speed and strategic decision comprehensiveness (Souitaris & Maestro, 2010).</p> <p>CEO transformational leadership behaviors affect firm innovation (Elenkov et al., 2005).</p>	<ul style="list-style-type: none"> * Study how a certain characteristic may have complementary or conflicting effects on firm-level outcomes if we adopt different theoretical perspectives. * Study how strategic leaders' attributes and behaviors affect other functions beyond strategic choice.
Strategic leaders' relationships	Agency theory; Theories of teamwork; Social comparison theory; Tournament theory; Shared leadership	<p>Social support from fellow CEOs reduces the negative effects that a personal problem might have on a CEO's effectiveness (McDonald & Westphal, 2011).</p> <p>CEOs favor working with new board directors with either similar levels of narcissism or those with prior experience with narcissistic CEOs and such new directors are supportive of CEOs' risk-taking decisions (Zhu & Chen, 2015).</p> <p>Pay disparities among the TMT can influence firm performance negatively (Carpenter & Sanders, 2002; Fredrickson et al., 2010; Ridge et al., 2015).</p> <p>Board heterogeneity and multiplexity are positively associated with the speed with which a diverse alliance portfolio emerges in a population of firms (Beckman et al., 2014).</p> <p>CEO stock options increase risky investments (R&D, M&As, and capital investments) leading to a larger variance of performance (Sanders & Hambrick, 2007).</p> <p>CEO-board chair separation is positively associated with R&D (Kor, 2006).</p> <p>TMT heterogeneity enhances the resource-action linkage and hinders the action-performance linkage (Ndofor, Sirmon, & He, 2015).</p> <p>The power gap between co-CEOs has an inverted U-shape relationship with performance (Krause et al., 2015).</p> <p>The presence of a COO is negatively associated with firm performance (Hambrick & Cannella, 2004).</p>	<ul style="list-style-type: none"> * Investigate other ways besides compensation that directors can affect CEOs. * Extend theoretical arguments about CEO-board relationships to study CEO-TMT relationships and vice versa. * Study how executives engage in formal and informal shared leadership.
External perspectives of strategic leadership	Signaling theory; Institutional theory	<p>CEO's stock ownership of his/her firm and external directorship enhances the market's perception of CEO financial certification (Zhang & Wiersema, 2009).</p> <p>TMT employment affiliations and CEO's role experience signal organizational legitimacy and affect investor decisions in the IPO (Higgins & Gulati, 2006).</p> <p>TMT legitimacy (industry experience, role experience, age, and university degrees) reduces IPO underpricing (Cohen & Dean, 2005).</p> <p>Outside successors enhance firm profitability due to the legitimacy associated with this practice (Chung & Luo, 2013).</p> <p>CEO education and tenure affect the likelihood of voluntarily disclosing environmental information (Lewis, Walls, & Dowell, 2014).</p>	<ul style="list-style-type: none"> * Recognize different external leadership styles (e.g., active vs. reactive, shared vs. CEO-focused, and conformist vs. nonconformist) and study their consequences.

might affect the firm. Such biases explain why firms with overconfident CEOs are less responsive to corrective feedback (Chen et al., 2015). Theories of behavioral decision making such as prospect theory have

been applied to strategic decisions, supporting the general premise of bounded rationality and the use of heuristics by executives (e.g., Lim, 2015). Another research stream has included the study of routines and

the behavioral theory of the firm, leading to arguments about experience and its effect on learning and subsequent decision making. For instance, prior experience of executives in implementing a certain strategy enhances the replication of that strategy in other firms (Nadolska & Barkema, 2014; Westphal & Fredrickson, 2001).

A more in-depth look into the minds of strategic leaders has been promoted in the managerial cognition literature, which studies mechanisms linking leaders to firm-level outcomes based on their information-processing attributes. Strategic leaders vary in terms of what they attend to, how they interpret information, and how they make decisions (e.g., Marcel et al., 2010). The environment might affect executives' cognitive processes, but certain individual-level differences such as temporal orientation can also explain why heterogeneity is seen in firms' actions in similar environmental conditions (Nadkarni, Chen, & Chen, 2015). Some scholars have broadened the scope of this research by studying cognition at the team level and how executives develop shared mental models (e.g., Souitaris & Maestro, 2010).

Another stream devotes attention to how strategic leaders influence their firms through leadership styles. Drawing from the full-range theory of leadership (Avolio & Bass, 1991), this area's proposed mechanisms highlight the interaction between strategic leaders and their followers to suggest how behaviors influence other firm members who subsequently play key roles in determining firm-level outcomes (Elenkov et al., 2005; Jansen et al., 2009).

Strategic leaders' relationships

Studies in this category focus on the relationship among strategic leaders within and across firms and on how these relationships shape firm behavior. Studies drawing on theories about teamwork, principal-agent relationships, and social comparison processes suggest that strategic leaders can influence firm-level outcomes through their relationships with other leaders. Theories in this category focus on the social aspects of executives and emphasize the relationships between them. For example, work drawing on social comparison theory (Festinger, 1954) and equity theory (Adams, 1965) highlights that executives perceiving unfair compensation (relative to other executives) might take actions that lead to a fairer situation or restore equality. The economic perspective on this issue suggests that compensation disparities also motivate top managers to increase their inputs and reach higher strategic leadership positions (Wowak et al., 2017).

Some researchers, using the network perspective and the notion of social embeddedness, have found that the connections of CEOs with other firm members affect their access to critical resources (Chung & Luo, 2013). The social network perspective goes beyond networks within the boundaries of firms by suggesting how interlocking directors can serve as bridges that connect firms via alliances (Beckman et al., 2014).

Studies regarding executives' relationships often rely on dispositional attributes to explain how such traits can affect firms through relationships that executives develop. For example, narcissistic CEOs favor working with new board directors who share their levels of narcissism or with directors who have worked previously with narcissistic CEOs, because such directors will be more supportive of CEOs' risk-taking decisions (Zhu & Chen, 2015).

Work drawing on agency theory focuses on corporate governance, executive compensation factors, and the influence of these on executive decisions. The main argument is that shareholders (principals) have different risk preferences than managers (agents), who tend to pursue their own interests (Hill & Snell, 1988). Additionally, the notion of managerial short-termism suggests that executives often prefer projects with shorter time-horizons even if they are suboptimal compared with those with longer time horizons (Laverty, 1996). Alignment of these risk and temporal preferences through compensation is supposed to mitigate the agency problem. Factors such as CEO power or board monitoring moderate the proposed relationships. Decisions that involve

a significant amount of risk or temporal trade-offs (R&D, M&As, and large investments) can be explained by agency theory and are likely affected by their associated levels of risk for the firm (Alessandri & Seth, 2014; Kroll et al., 2008; Sanders & Hambrick, 2007). In summary, the application of agency theory in strategic leadership focuses on the board-CEO relationship as an example of the principal-agent relationship and investigates the mechanisms through which boards align CEOs' and shareholders' interests.

Teamwork research considers the top management team to be the major influence on firm behavior. The focus of attention is on team members' interactions and conflicts and the flow of information within the team. Differences among team members can be beneficial in that they provide access to broader perspectives, various points of view, and better decision making at the upper echelons, but they may also lead to conflict and communication barriers (Ndofor, Sirmon, & He, 2015).

Research on strategic leader relationships also includes the shared leadership perspective, which holds that leadership is often distributed across a group of individuals in both an official and an unofficial manner (Ensley, Hmieleski, & Pearce, 2006). The presence of co-CEOs is one way to practice shared leadership formally, and research has shown it can benefit firms as long as the unity of command is assured or not disrupted (Krause et al., 2015). Shared leadership relies on the assumption that a single individual often lacks the full range of abilities required to fulfill the functions of leadership, so that sharing this responsibility among those with complementary abilities might enhance leadership effectiveness. In support of this idea, Hambrick and Cannella (2004) found that CEOs who lack experience in operational activities and in managing the focal firm are more likely to have Chief Operating Officers (COOs). Because performing functions of strategic leadership requires a vast array of competencies, we believe that the shared leadership perspective is well suited for studying the effectiveness of strategic leadership across its functions.

External perspectives of strategic leadership

This group includes studies of how firms' external environments influence, or can be influenced by, strategic leaders. Scholars in this area have relied on signaling and institutional theory to propose how the market or stakeholders react to strategic leaders' actions and characteristics, often invoking the concept of firm legitimacy. Outsiders often do not have access to detailed information regarding a firm and its executives and instead rely on observable attributes of executives to make judgments about the firm (Zhang & Wiersema, 2009). The role of executives' legitimacy is pronounced in situations such as IPOs in which the market does not possess extensive information regarding the firm (Cohen & Dean, 2005).

Some studies have explored how institutional pressures can induce firms to disclose environmental information, depending on CEO education and tenure (Lewis et al., 2014). While this stream of research assumes that strategic leaders seek firm legitimacy, Yeung, Lo, and Cheng (2011) questioned the motivation of leaders by showing that adoption of certain practices (e.g., ISO 9000) does not improve firm performance, but does increase CEOs' compensation.

Contextual factors

In this section, we review the boundary conditions and contextual factors that shape the influence of strategic leaders on their organizations. As Porter and McLaughlin (2006) argued, leadership in organizations does not operate in a vacuum. Context is a major factor affecting leadership behaviors and outcomes, and scholars have addressed the importance of including context in studies of strategic leadership (e.g., Boal & Hooijberg, 2001; Osborn, Hunt, & Jauch, 2002; Porter & McLaughlin, 2006).

We categorize contextual factors as internal and external. We follow Johns's (2006: 386) definition of context as "situational opportunities

Table 7
External and internal context.

Variable	Description
EXTERNAL CONTEXT	
Competitive uncertainty (Qian et al., 2013; Westphal et al., 2006)	Predicting shifts in technology, demand, and/or resource supplies is cognitively demanding; inhibits leaders' ability to control outcomes; adds managerial job stress.
Economic development (emerging vs. developed markets) (Chung & Luo, 2013)	Emerging markets face rapid and large-scale changes, have weak market infrastructures that cause high transaction costs, and are contexts of deregulation and intensified competition.
Environmental complexity (Tang, Li, & Yang, 2015)	Reflects the extent of competition and heterogeneity in a firm's operating environment; increases with low industry concentration and greater number of competitors; increases interconnectedness of competitors; requires attention from leaders.
Environmental dynamism (Nadkarni & Chen, 2014; Tang, Li, & Yang, 2015)	Conditions are unpredictable and unstable; capabilities have to be constantly updated; has considerable mean-ends ambiguity.
Environmental munificence (Tang, Li, & Yang, 2015)	There are opportunities and resources for growth; provides leaders with multiple options for strategic directions.
Environmental uncertainty (Agle et al., 2006; Waldman, Ramirez, House, & Puranam, 2001)	Increases the perceived risk of organizational failure; gives leaders symbolic importance; increases dominance of boundary-spanning units, as opposed to firms' dominant technical cores.
Environmental turbulence (Eisenmann, 2002)	Rapid, discontinuous, and unpredictable changes in factors that influence firms' long-term performance (e.g. technology, regulation, or customer demand).
Industry dynamism (Hambrick & Cannella, 2004)	Characterized by growing demand, uncertainty, and technology intensiveness; increases information processing demands through external vigilance and frequent strategy reshaping.
Industry uncertainty (Luo et al., 2014)	Characterized by instability, unpredictability, short product cycles, fierce competition, and volatile sales responses; allows CEOs to generate more appeal for their visions and rally followers more effectively.
Institutional support (Qian et al., 2013)	Administrative institutions provide support for firms to reduce adverse effects of inadequate institutional infrastructure; reduces leaders' job demands in coping with institutional deficiencies; provides access to resources; reduces pressure in dealing with hostile institutions and predicting decision outcomes.
Market complexity (Souder, Simsek, & Johnson, 2012)	There is dissimilarity of market elements and their interconnectedness; raises information processing demands; increases difficulty for firms to assess their strategic situation; demands a larger administrative infrastructure; provides leaders with more information and variables than they can attend to.
Social culture (Elenkov et al., 2005)	The system of values, norms, attitudes and elements of mental programming that are common for members of a social group; it can shape organizational interactions and strategic processes.
INTERNAL CONTEXT	
Firm age (Jayaraman, Khorana, Nelling, & Covin, 2000; Ling, Zhao, & Baron, 2007)	Routines, systems, and standard operating procedures emerge with age; a developed organizational architecture reduces the need for leaders to get involved with operational activities.
Firm life stage (Peterson, Walumbwa, Byron, & Myrowitz, 2009; Tzabbar & Margolis, 2017)	Success is more uncertain and challenging in startups compared to established firms; firms in the growth stage have multiple expansion opportunities and flexibility to experiment with new ideas; leaders might find more acceptance in startup firms due to receptivity to change and propensity for risk taking, whereas leaders who question the status quo might be viewed as unsettling in established firms bound by traditions and rules.
Firm prior performance (McDonald & Westphal, 2003)	Poor prior performance induces leaders' subjective uncertainty about their strategic beliefs; poor prior performance drives leaders to seek out and rely on advice from other executives.
Firm size (Jayaraman et al., 2000; Ling et al., 2007)	Large firms face administrative challenges associated with managing complex organizational systems. Small firms face the entrepreneurial challenge of establishing firm viability; leaders may not possess the variety of skills required to manage different firm sizes.
Organizational culture (Hartnell, Kinicki, Schurer Lambert, Fugate, & Doyle Corner, 2016)	Composes shared values and norms and informs employees about how to perceive, think, and behave in relation to organizational issues; founder CEOs can imprint their values and beliefs on the organizational culture, but there can be dissimilarities between leadership and culture for nonfounding CEOs.
Ownership type and concentration (Chung & Luo, 2013; David, Hitt, & Gimeno, 2001; Lim & McCann, 2014; Strike, Berrone, Sapp, & Congiu, 2015)	Ownership and compensation shape strategic decision-making processes; institutional shareholders engage in activism to influence strategic decisions; CEO stock option grants influence executives' willingness to take strategic risks; director stock option grants influence monitoring and managerial evaluation; CEOs near retirement behave differently in family versus non-family firms.
Resource quality (Holcomb, Holmes, & Connelly, 2009)	Certain resources possessed by the firm can have more inherent value-creating potential than others; leaders can use their abilities to increase the productivity of resources.
Succession characteristics (Karaevli & Zajac, 2013)	Corporate stability shapes how new CEOs are able to make strategic changes.

and constraints that affect the occurrence and meaning of organizational behavior as well as functional relationships between variables." Thus, we consider situational variables that moderate the relationship between strategic leadership attributes and firm-level outcomes as contextual factors. We provide an overview of studied context variables and their description in Table 7.

External context

We include in this category all moderating variables that constitute contextual conditions outside the organization's boundaries. These external factors consist of political or macroeconomic conditions, industry

and competition variables, and societal or cultural characteristics.

A prominent way to study the external context is to explore the unpredictability or instability of the conditions in which firms operate. A common argument is that uncertainty or dynamism in the industry, as well as institutional deficiencies of the country, make strategic leadership more challenging through increases in information processing demands and the need to update strategies regularly (Qian et al., 2013; Tang, Li, & Yang, 2015). Conversely, these conditions can give strategic leaders symbolic importance and provide them with more opportunities to rally followers (Agle et al., 2006).

Conditions of the external context can have a determinant role in how certain strategic leaders' attributes shape firm-level outcomes. For

Table 8
Categories of strategic outcomes.

Outcome category	Measurement	Research directions
Firm performance	Accounting measures (ROA, ROE, ROS) (Hambrick & Cannella, 2004; Ridge et al., 2015; Souitaris & Maestro, 2010) Market-to-book ratio (Menz & Scheef, 2014) Tobin's q (Ndofor, Sirmon, & He, 2015) Self-reported (subjective) measures (Herrmann & Nadkarni, 2014) Abnormal returns (Luo et al., 2014) Employee productivity (Chadwick et al., 2015) IPO pricing (Cohen & Dean, 2005) Return on invested capital (Henderson, Miller, & Hambrick, 2006) Decisions to invest in the firm (Higgins & Gulati, 2006) Tobin's q (Waldman et al., 2001) Acquisition-related performance (Nadolska & Barkema, 2014) Firm survival (Bermiss & Murmann, 2015)	Use performance as an outcome of other mediators. Develop theories matching specific performance dimensions. Test theories with multiple performance measures and/or theorize strategic leadership effects on different performance measures. Design studies that capture strategic leadership and firm performance relationships over time.
Strategic choices	Competitive actions (Marcel et al., 2010; Nadkarni & Barr, 2008) Restructuring initiatives (Chen, 2015) Strategic risk-taking (Kish-Gephart & Campbell, 2015) Diversification (Alessandri & Seth, 2014) HR system adoption (Chadwick et al., 2015) TQM adoption (Young, Charns, & Shortell, 2001) Strategic change (Nakauchi & Wiersema, 2015; Zhang, 2006) Acquisition decisions (Gamache et al., 2015) New market entry (Diestre, Rajagopalan, & Dutta, 2015) Geographic location of investments (Barkema & Shvyrkov, 2007) Strategic dynamism and non-conformity (Wowak et al., 2016) Strategic distinctiveness (Crossland, Zyung, Hiller, & Hambrick, 2014) Attributes of strategic decisions (e.g. decision comprehensiveness, speed, or quality) (Carmeli & Schaubroeck, 2006; Clark & Maggitti, 2012; Friedman, Carmeli, & Tishler, 2016)	Explore how strategic leaders combine different types of strategic choices. Use methods to quantify strategic choices that are not binary (e.g. strategic change). Conduct qualitative studies of how strategic decisions evolve. Explore unrealized strategic decisions.
Innovation	R&D spending (Barker & Mueller, 2002) Self-reported measures (Jansen et al., 2009) Patents (Makri et al., 2006; Wu, Levitas, & Priem, 2005) New product introduction (Nadkarni & Chen, 2014) Adoption of technological discontinuities (Gerstner et al., 2013) Innovation impact on revenue (Tang, Li, & Yang, 2015)	Consider the influence of strategic leaders on multiple stages of innovation (e.g. how strategic leaders influence generation or implementation of innovative ideas). Explore different types of innovation. Study strategic leaders' effects on both extent and effectiveness of allocating resources to innovation (e.g. Cummings & Knott, 2018).
Social and ethical issues	Moral and legal challenges (Freeman, Wicks, & Parmar, 2004) CSR (Hafenbradl & Waeger, 2017; Petrenko et al., 2016) Corporate tax avoidance (Christensen et al., 2015) Product safety problems (Wowak et al., 2015)	Explore strategic leaders' motivations and incentives behind illegal or controversial behaviors. Study why strategic leaders choose to avoid these behaviors when they have an opportunity. Explore how strategic leaders justify illegal and/or controversial actions. Consider whether certain strategic leadership functions have more ethical and/or legal challenges.

example, in dynamic industries, a future temporal orientation by strategic leaders leads to a higher rate of new product introductions, because these leaders are better at detecting future market and technological trends (Nadkarni & Chen, 2014). In turbulent environments, companies led by owners, rather than by agent CEOs, have a higher propensity to exit a business (Eisenmann, 2002). In addition, market complexity constrains the market expansion efforts of founder CEOs more than of agent CEOs (Souder et al., 2012). Certain social cultures increase the influence of strategic leaders' transformational behaviors on firm innovation (Elenkov et al., 2005).

Overall, the notions of fit and discretion are associated with the external context. Some strategic leaders are better able to lead and have a stronger influence on their firms under certain external conditions. Analogously, external circumstances can make strategic leadership less relevant and reduce strategic leaders' latitude of action. One opportunity for future research is to organize these dimensions of the external context to clarify their relative importance and the theoretical mechanisms through which they challenge strategic leadership. Because scholars usually do not include culture, competition, or macroeconomic conditions in one study, it is unclear which of these contextual variables has stronger implications for strategic leadership. Furthermore, stimuli coming from these various dimensions of the external context are likely to have different implications for different strategic leaders. For example, leaders might pay more attention to specific stimuli because of their own attributes or the characteristics of their firms.

Internal context

Scholars have taken three dominant perspectives in studying the role of the internal context. First, the internal context can make it difficult for strategic leaders to influence their firms, thus reducing the leaders' discretion. Commonly studied variables for this argument include firm age and firm size. As the size of the firm increases, so do hierarchical levels and the distance between strategic leaders and firms' operations. This distance might reduce the influence that strategic leaders have on firm-level outcomes. In the case of age, the argument is that routines and structures become less flexible as firms get older, thus diminishing the ability of strategic leaders to make changes. Notably, studies exploring the firm life cycle have shown an amplified influence of strategic leaders in young and small firms (Ling et al., 2007; Peterson et al., 2009; Tzabbar & Margolis, 2017).

Second, the internal context can either substitute for or highlight the need for specific leadership attributes and behaviors. For example, Holcomb et al. (2009) found that managers' ability is less important to organizational performance when resource quality is lower. Hartnell et al. (2016) found that CEO task and relational leadership have a greater effect on firm performance in the absence of a task and relationship culture. As another example, the family business context increases the need for strategic leaders to be concerned about the long-term socioemotional wealth of the family and not just short-term interests (Strike et al., 2015).

Finally, the internal context can increase the complexity of the strategic leader's job. For example, corporate instability reduces the ability of outsider CEOs to achieve strategic change (Karaevli & Zajac, 2013), but outsider CEOs increase performance by providing legitimacy when the firm has foreign institutional investors (Chung & Luo, 2013). Ownership concentration and type of investors can be a source of complexity for leaders, because investors can have different interests and can monitor executives to pursue particular agendas (David et al., 2001). Complexities can also arise from organizational task demands, although CEOs may alleviate these by appointing a chief operating officer (Hambrick & Cannella, 2004).

Strategic-level outcomes

In this section, we place studied firm-level outcomes of strategic leadership into their most representative categories. Table 8 presents these categories with examples and research directions.

Performance

Strategic leadership studies have focused on various measures of firm performance as the primary outcome that strategic leaders affect, given the economic relevance and established recognition of performance as one of the most important in strategic management, as well as its relatively agreed-upon measures. To date, dozens of studies in the field indicate that strategic leaders matter for firm performance. Despite the availability of established measurement tools and criteria, firm performance can be difficult to study because it is a multidimensional construct that can encompass profitability, growth, stock market, or liquidity (Hamann, Schiemann, Bellora, & Guenther, 2013). Results might vary if different performance dimensions are used, and the variation could indicate conflicting effects that demand further theory development. For example, strategic leaders might have a strong short-term influence on one dimension and a weak, long-term influence on another. Additionally, strategic leaders may need to trade off performance on one dimension with performance on another, and research is required to examine the frequency and reasons for such behavior.

Strategic choices

Studying attributes and their effect on the content of strategic choices is a recent and increasingly important trend in research on the outcomes affected by strategic leaders. Instead of focusing on distant outcomes (e.g., performance), studying strategic choices allows us to understand the detailed processes through which strategic leaders affect their firms. This approach is especially informative to the debated issue of whether and how strategic leaders matter for firm performance (Liu et al., 2018). Some scholars have studied the content of strategic choices, such as their degree of risk (Kish-Gephart & Campbell, 2015), whereas others have focused on strategic choice processes, such as comprehensiveness or speed (Souitaris & Maestro, 2010). Both approaches have led to the development of new measures while complementing our knowledge of how strategic leaders affect their firms through influencing firm strategic decisions.

Innovation

Research has supported the idea that strategic leaders' dispositions and team-level behaviors influence innovation via the allocation and management of R&D resources. While most research in this area focuses on how strategic leaders affect innovation inputs, recent work has studied the role of leaders in the effectiveness of innovative efforts. Cummings and Knott (2018) found that insider CEOs are more successful than outsiders in extracting value from resources devoted to R&D and argued that one reason for the decline in R&D productivity in firms is the increasing popularity of hiring outsider CEOs. Future

research should specify the mechanisms through which strategic leaders influence a particular facet of innovation and employ measures accordingly. For example, Perry-Smith and Mannucci (2017) suggested that innovation encompasses the four stages of idea generation, idea elaboration, idea championing, and idea implementation. Strategic leaders can have different types of influence on each of these stages. Some leaders, for instance, might be highly active in idea generation while ignoring critical phases of implementation, while others might do the opposite.

Social and ethical issues

Stakeholder theory highlights the importance of non-economic factors in long-term performance and the role of strategic leaders in dealing with moral and legal challenges (Freeman et al., 2004). Regarding social and philanthropic responsibilities of the firm, research shows the influence of strategic leaders on CSR (Hafenbradl & Waeger, 2017; Petrenko et al., 2016). Concerning firms' legal obligations, strategic leaders have been shown to affect corporate tax avoidance and product safety problems depending on their political orientation and compensation (Christensen et al., 2015; Wowak et al., 2015). Future research on this topic can uncover strategic leaders' motives and incentives behind firms' moral and illegal actions, the role of leaders in avoiding or engaging in these actions, how leaders respond to or justify these actions, and the implications of these actions on other firm-level outcomes.

Discussion

Decades of research on CEOs, TMTs, and BODs have explored the various ways in which strategic leaders influence their organizations. A wide variety of theories have linked an assortment of leadership attributes to different firm-level outcomes (Bromiley & Rau, 2016; Finkelstein et al., 2009; Wowak et al., 2017). Surprisingly, however, there is no clear consensus on the concept of strategic leadership or a widely-accepted organizing framework. We set out to answer the crucial questions about the essence of strategic leadership, the main functions of strategic leaders, the reasons for their behavior, and the mechanisms that show how they influence organizational outcomes. In doing so, we developed a definition and a framework of strategic leadership and proposed directions to guide future research. In the following paragraphs, we consolidate the main criticisms and suggestions for the field, suggest guidelines for bridging existing theoretical silos, and discuss the framework's contribution to practice. We also synthesize the present (what we know) and the future (where we should go) of the field in Table 9.

Consolidating and moving beyond firm performance

A critical effort for future studies is to move beyond the field's prevalent focus on linking strategic leaders to a wide-ranging firm performance construct, i.e., a construct conceived very generally and measured in multiple and interchangeable ways. This focus has generated a critical concern: relying on a general performance construct leads to a spread of theories that face difficulties distinguishing the mechanisms through which strategic leaders influence firms because multiple antecedents are linked to the same construct. Ultimately, any strategic leadership decision or behavior has a potential impact on firm performance. We encourage strategic leadership scholars to address this issue in future studies in two main ways. First, it is vital to acknowledge the multidimensionality of the performance construct (see Hamann et al., 2013) and develop theories that relate strategic leadership to more precise performance dimensions. Moreover, the use of a performance measure must follow theoretical reasons and be evident in theory development.

Second, the multifaceted nature of strategic leadership we uncover in this review indicates it might be time to consider moving beyond

Table 9
Present and future of strategic leadership research.

What we already know	What we need to explore more	Connection to our framework
Strategic leaders affect firm performance	The different ways through which strategic leaders affect firms	Specify function of leadership Consider proximal outcomes
Strategic leaders' attributes matter	The interactions of different attributes How the same attributes might have contradictory consequences with regard to different functions and outcomes	Study the interactions among attributes of different categories. Specify function of leadership Study attributes at different levels (CEO, TMT, BOD)
Context determines strategic leaders' discretion	How strategic leaders can influence/shape context	Go beyond the discretionary view of context
Context influences the extent to which strategic leaders matter	How context can influence the decisions, behaviors, and interactions of strategic leaders	Consider the active role of leaders on context and vice versa
Strategic leaders' compensation matters	How the impact of monetary rewards might depend on personality and cognitive attributes	Connect the agency perspective to other theoretical perspectives
TMT diversity matters and has both positive and negative consequences	How other factors (CEO-TMT interface, strategic leaders' personality and cognition, context) moderate the impacts of TMT diversity	Connect the TMT teamwork perspective to other approaches
Strategic leaders' leadership style matters	How theories of leadership at micro levels should be adjusted for strategic levels	Adjust micro theories of leadership to apply them to upper-level positions

performance measures and include other proximal outcomes. Ultimately, the field of strategic leadership has the task of exploring how individuals at higher organizational levels influence their firms, which does not necessarily have to include a performance measure. Our purpose lies in assisting strategic leaders with solid insights to guide the various components of their organizations, and that is likely to require a deep and focused theorizing of multiple firm-level outcomes.

Extending functions

Although we encourage a closer investigation of each function, strategic leaders must often perform functions simultaneously. It is likely that there are significant interactions among these functions and that leaders' performance on one function affects their ability to perform others. For example, motivating and influencing employees can impact the implementation of strategic choices, and poorly managing contradictions within the firm can affect external leadership by creating a negative image of the firm. The limited resources and skills of strategic leaders sometimes create trade-offs regarding these functions so that leaders necessarily need to focus on one function at the cost of ignoring another. Future research should examine the potential outcomes of balancing the performance of these eight strategic leadership functions. This effort not only helps with the field's attempts to explore mediatory outcomes that precede firm performance and to develop process models (Liu et al., 2018), but also helps to create theories that provide richer explanations of the effects of strategic leaders' actions. In doing so, we might uncover how certain actions have implications for multiple functions and how strategic leaders attempt to manage the different functions of their role given resource and attentional constraints.

Extending our knowledge about various functions also demands a closer look at the strategic leadership attributes linked with each function. Strategic leaders with specific attributes might tend to focus on or be better at managing particular functions. For example, CEOs' dispositional attributes influence their information processing and decision-making patterns. However, it is important to consider that those same characteristics are likely to influence how CEOs relate to other strategic leaders such as non-executive organizational members (Fu, Tsui, Liu, & Li, 2010; Raes, Heijltjes, Glunk, & Roe, 2011) and external stakeholders. Transformational strategic leaders might excel at motivating and influencing their followers but not design processes and monitor results throughout the firm (Antonakis & House, 2014). Further research should explore not only how various attributes influence different functions but also how strategic leaders might compensate for their lack of focus on specific functions by delegating these functions to their TMTs or other organizational members.

A more active role of context

We highlight the variety of contextual factors that have been studied to date. However, the dominant theoretical lens through which to view context has been grounded in managerial discretion, i.e., the extent to which managers can exert control over their firms (for a review, see Wangrow, Schepker, & Barker, 2015). While discretion is undoubtedly important, we suggest that context can play a critical role in strategic leadership theories. Scholars can explore how the internal context can motivate and initiate certain decisions and actions. The behavioral theory of the firm, for example, explains how *realized* performance, compared to *aspirational* performance, can trigger problematic or slack search (Cyert & March, 1963). Performance, in turn, can evoke certain attributes in strategic leaders such as risk-taking behavior (Lim & McCann, 2014) and advice-seeking behavior (McDonald & Westphal, 2003). Scholars can also explore how the external context might influence strategic leaders' behaviors. For example, CEOs who enter the workforce during prosperous economic times are more likely to use unethical means for personal gain later in their careers (Bianchi & Mohliver, 2016). The attention-based view of the firm is another theoretical perspective that can explain how external factors shape strategic leadership through bottom-up attentional processes (Ocasio, 1997). Supporting this view, Cho and Hambrick (2006) found that deregulation in the airline industry changed executives' attention from an engineering to an entrepreneurial focus. Thus, it is important to go beyond a discretionary view and consider context an important determinant of strategic leadership behaviors.

Another suggestion is to theorize how strategic leaders influence context (Weick, 1977), particularly the internal context where strategic leaders may exert significant control on the basis of their authority. For example, Liu et al. (2018) suggest that strategic leaders can influence organizational processes such as culture or adaptability, and Zhang et al. (2017) found that CEO personality shapes firms' innovative culture. In turn, these contextual factors can drive strategic leaders' influence on firm performance (Liu et al., 2018). The influence of strategic leaders on their context (rather than how their effects are shaped by it) represents a significant direction to advance strategic leadership theorizing.

Finally, future research can consider the internal and external contexts simultaneously. For example, strategic leaders of established firms in a highly dynamic industry often face different demands than leaders of young firms entering that industry. Thus, an exclusive focus on either the internal or external context might be incomplete, especially considering that both contexts impose simultaneous attentional demands on strategic leaders.

Tailored theories

Strategic leadership, as a rapidly growing field, lacks theories that are primarily developed to study it, and except for upper echelons, theories are borrowed from other areas and often not customized to the specific characteristics of the field. Upper echelons theory played an important role in the growth of the field by suggesting the use of demographic variables to capture personality and cognitive attributes of strategic leaders, although the use of demographic variables is losing its attractiveness with advances in strategic leadership research. However, upper echelons theory remains the only theory specific to the field of strategic leadership. Comparing the strategic leadership literature with the more established micro-OB leadership research and its rich body of theories reveals the need for theories exclusively developed to study leadership at the strategic level. New theorizing can be built upon other established theories such as agency or institutional theory but should consider the uniqueness of the strategic leadership context. While we advocate the adoption of theories from other fields, we believe that strategic leadership should be more than a context for testing the theories of other fields. Perhaps it is time to focus on how strategic leaders and their tasks constitute a unique context and study the adjustments needed to account for differences from other contexts. For example, researchers need to explain how TMT diversity differs from that of a random team of employees working together on a project or how transformational leadership behaviors at the CEO level might differ from those at lower levels.

Integration of silos

By classifying strategic leadership studies, using the various components of our framework, we can clearly distinguish five prevalent research streams in the field. The upper echelons stream primarily addresses how top managers influence their firms through strategic decisions, given their attributes and dispositions. The agency theory stream primarily explores the influence of the CEO-BOD relationship on the firm. The teamwork stream primarily explores the influence of the TMT on the firm based on team diversity and conflict. The institutional stream emphasizes CEOs' role in maintaining or enhancing a firm's legitimacy. Finally, the micro-level stream focuses on how executives' behaviors and leadership styles affect firm-level outcomes primarily through motivating and influencing subordinates. In Table 10, we show how these streams have focused on certain combinations of types of leaders, characteristics, functions, contextual factors, theories, and outcomes.

The evident differences in these five streams indicate the variety of research questions that have been explored in strategic leadership. However, we believe that an essential effort for future research is to bridge these theoretical silos and distinguishable streams of research. For example, by encouraging conversation between upper echelons and agency theory perspectives, we can explore how individual differences of executives might influence the role of executives' compensation in shaping strategic choices. Similarly, by combining the micro and teamwork perspectives, we can determine how certain leadership behaviors of CEOs can moderate the relationship between TMT diversity and firm-level outcomes.

The integration of these silos can allow us to expand the strategic leadership field in useful directions that are currently unexplored. In Table 11, we provide some suggestions on how these streams can mutually inform interesting research opportunities.

Incorporating trends

We encourage scholars to rely on our framework to consider societal trends that bring new perspectives to the field. For example, the prevalence of high-tech companies, often with young founders as CEOs, or billion-dollar startups founded and run by immigrants, are changing the

Table 10
Trends and research streams in strategic leadership literature.

Stream	Leader	Characteristics	Functions	Mechanisms	Context	Outcomes
Upper echelon theory/ managerial cognition	Mainly CEO, also TMT	Personality, cognition, knowledge and familiarity, ability, TMT diversity	Making strategic decisions; managing conflicting demands	Mainly dispositional features and strategic choice, also strategic leadership relationships	Internal and external (discretion)	Mediatory outcomes (choice), performance, innovation
Agency theory	Directors and CEO	Motivation (compensation), power, TMT payment	Making strategic decisions; performing human resource management activities (BOD toward CEO)	Strategic leadership relationships	External (risk)	Performance, strategic choice
Teamwork	TMT	TMT diversity	Making strategic decisions; overseeing operations and administration	Strategic leadership relationships		Performance, innovation
Institutional	Mainly CEO, also TMT	Credentials, TMT capabilities	Managing social and ethical issues; engaging with external stakeholders	External perspectives of strategic leadership	External	Corruptive behavior/ misconduct/positive firm behaviors (CSR)
Micro-level studies	Mainly CEO, also TMT	Charisma, CEO-TMT interface	Motivating and influencing	Mainly dispositional features and strategic choice, also strategic leadership relationships	Internal	Performance

Table 11
Bridging theoretical silos for the future.

Stream of research	Upper echelon theory/managerial cognition	Agency theory	Teamwork	Institutional	Micro
Upper Echelon Theory/managerial cognition		How do attributes of strategic leaders (as principals) affect their approach toward agents in the choice of principal agent mechanisms?	Study the role of individual attributes in forming team-level attributes such as team personality or shared mental models among executives.	How does a leader's career shape her attributes through normative isomorphism processes?	Can CEOs compensate their lack of competencies in an area by exercising empowering leadership styles?
Agency theory	How the impact of corporate governance and compensation mechanisms depends on leaders' attributes.		Does the impact of corporate governance mechanisms like compensation depend on TMT attributes such as role interdependence or faultlines?	How do practices like performance-based compensation become the norm of an industry? Do the adoption these practices signal outsiders?	Is it possible that certain leadership styles reduce the need for monitoring agents?
Teamwork	Are leaders with certain attributes (age, education, or personality) more prone to negative aspects of TMT diversity and its positive consequences?	Can the choice of compensation approach affect team processes such as how strategic leaders interact with each other?		How do environmental attributes such as culture and industry norms affect factors like TMT diversity?	Do certain TMT arrangements (e.g., strong faultlines) require customized leadership styles to reduce conflicts and increase TMT information processing effectiveness?
Institutional	How do certain attributes determine the leaders' external leadership approach (seeking conformity or uniqueness)?	How do strategic leaders behave if actions toward firm legitimacy are against their self-interests? Is it possible that CEO legitimacy and firm legitimacy become contradictory?	How do some TMT/BOD arrangements (having women or minorities in the team) signal legitimacy or uniqueness of a firm?		Can we extend the notion of leadership styles to the context of how strategic leaders perform their external leadership function?
Micro	Do CEOs' leadership style vary by their age, tenure, education, affect, or other attributes?	Can we extend the agency theory arguments from the context of board-CEO relationship to the CEO-TMT interface?	Do certain leadership styles enhance team level interactions of top managers?	Do outsiders care about the leadership styles of strategic leaders?	

common conception of the demographics of strategic leaders and perhaps question the application of existing theories. Movements in society (e.g., gender equality concerns, changing views about the purpose of corporations, increasingly activist role of corporations) might affect the practice of and research on strategic leadership. Finally, increased use of novel sources of information (e.g., social media activity or activity trackers) combined with the application of newer methods (e.g., content analysis and machine learning with big data) can be useful for studying strategic leadership in the near future.

Conclusion

We have developed a strategic leadership framework based on an extensive literature review and have attempted to bring more clarity to the field. We have provided suggestions for extending investigation beyond the usual streams of strategic leadership research and have encouraged scholars to use our framework to uncover relevant and novel research questions. We have also suggested that this framework can bring order to a seemingly fragmented literature and spark an organized development of the field. We hope that our framework assists scholars in better defining the concept of strategic leadership and in finding future opportunities for inquiry.

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